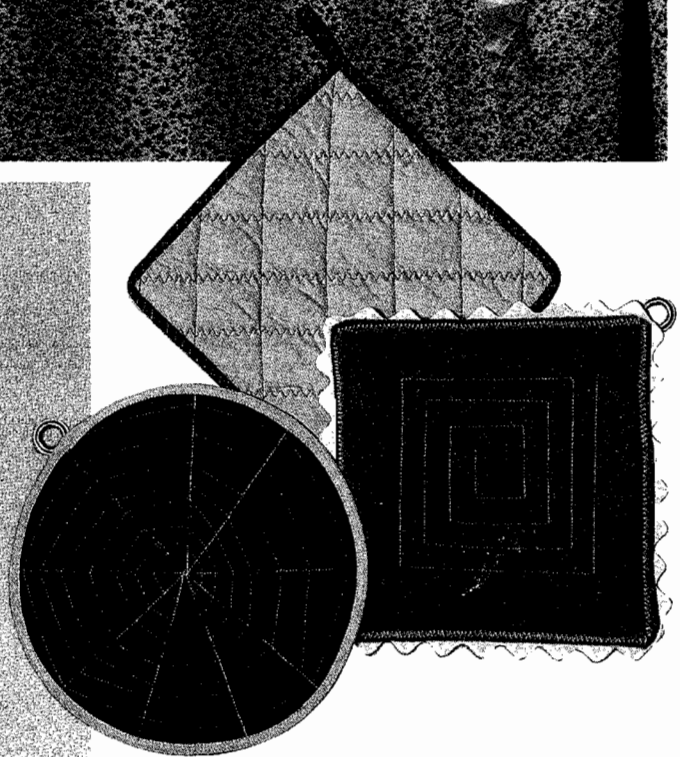
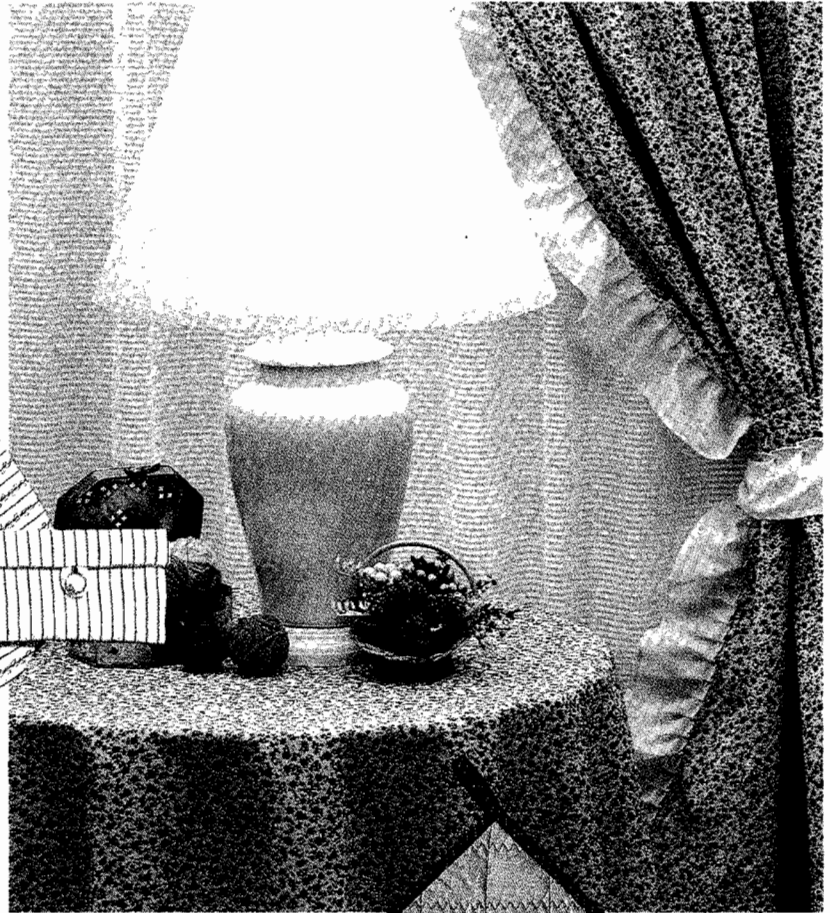
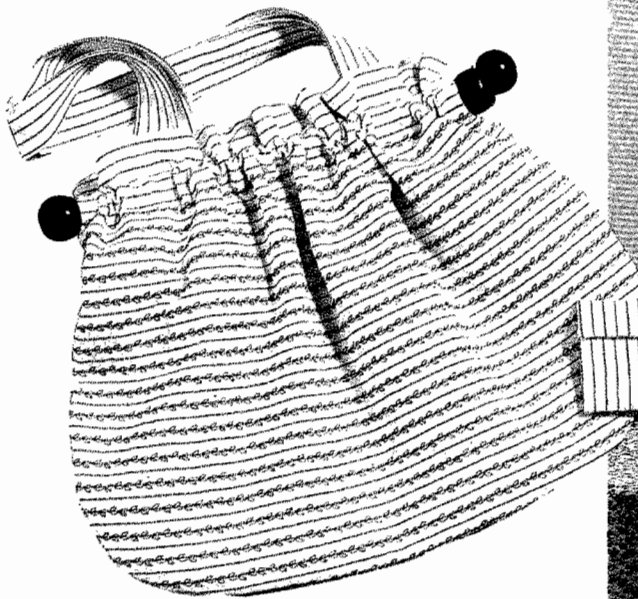


# CREATIVE TOUCH

## Fashion Machine 1036

*DELUXE FREE-ARM, STRETCH STITCH SEWING MACHINE*

# SINGER



# *enjoy carefree sewing!*

## CONGRATULATIONS . . .

You are about to discover the pleasure of sewing with your new *Creative Touch*\* sewing machine by SINGER. We know you are eager to get started on a sewing project . . . but we urge you to become familiar with this book before you begin. It is designed to help you get the benefit of all the capabilities of your machine. We recommend that you keep the following points in mind:


**do** choose the correct needle and thread for your fabric — if either is the wrong size or type, you may encounter broken or knotted thread, or faulty stitching. The Fabric, Thread, and Needle Table on page 7 will help you make a perfect choice.

**don't** sew with a bent or blunt needle. If the needle is damaged — or improperly inserted in the machine — it can cause skipped stitches. See page 6 for instructions.

**do** follow the instructions on page 8 for threading the machine.

**don't** forget to place the thread properly when you insert a wound bobbin. Page 11 tells you how to do this.

**do** become familiar with the instructions for regulating stitch length (pages 13 and 20), presser-foot pressure (page 12), and thread tension (pages 13 and 20).

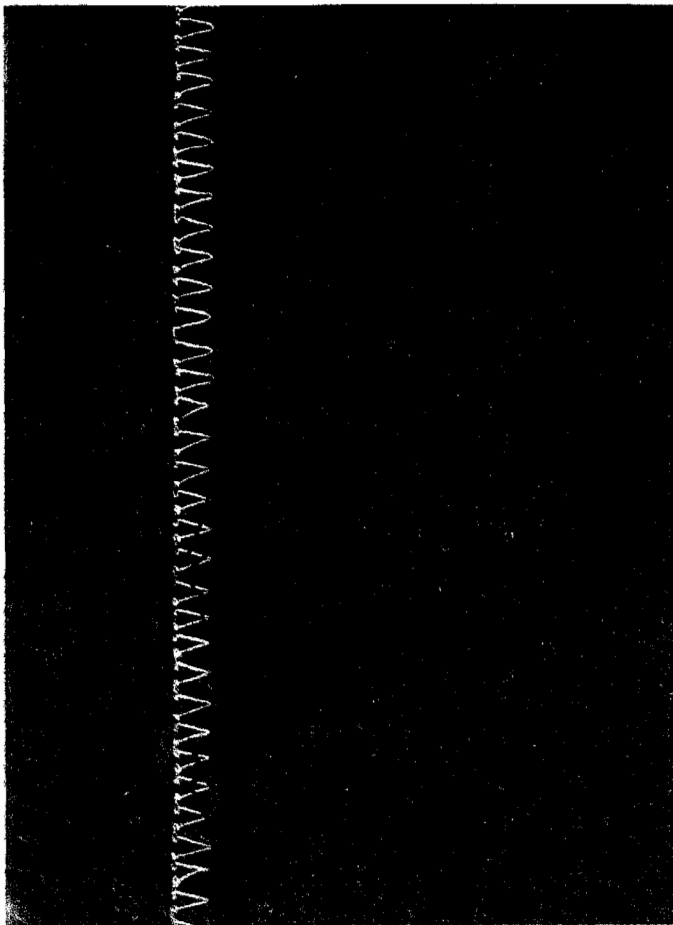
**don't** forget to set the machine for straight stitching at center (  ) needle position when you wind a bobbin (page 9) or use the straight-stitch plate and foot (page 2).

**do** remember to place the threads correctly under the presser foot when you start to sew. (When using zig-zag accessories, hold the thread at back of the presser foot for the first two or three stitches.) See pages 15 and 35.

**don't** allow lint and thread ends to accumulate in the bobbin case area or around the thread retainer. Clean your machine regularly, as instructed on page 52.

**do** remember that expert, dependable SINGER\* service is always available. If your sewing machine should require maintenance or repair, be sure to call your Singer Sewing Center or Authorized Singer Dealer. You will find the number listed under SINGER COMPANY in your telephone book.

Above all, **do** enjoy sewing!



Overedge stretch stitch on a stretchy knit

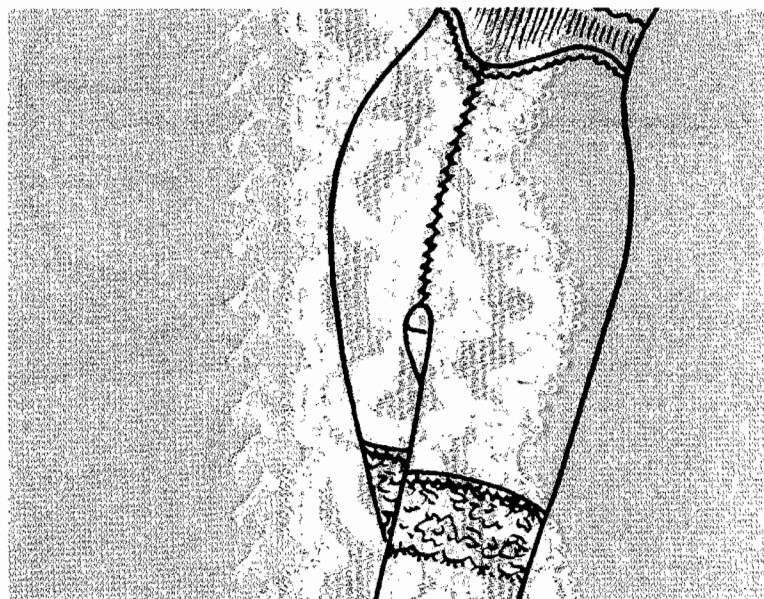
Sew like a pro with your  
**CREATIVE TOUCH<sup>\*</sup>**  
 Fashion Machine 1036



Delicate zig-zag stitching on satin



Flawless topstitching on leatherlike fabric

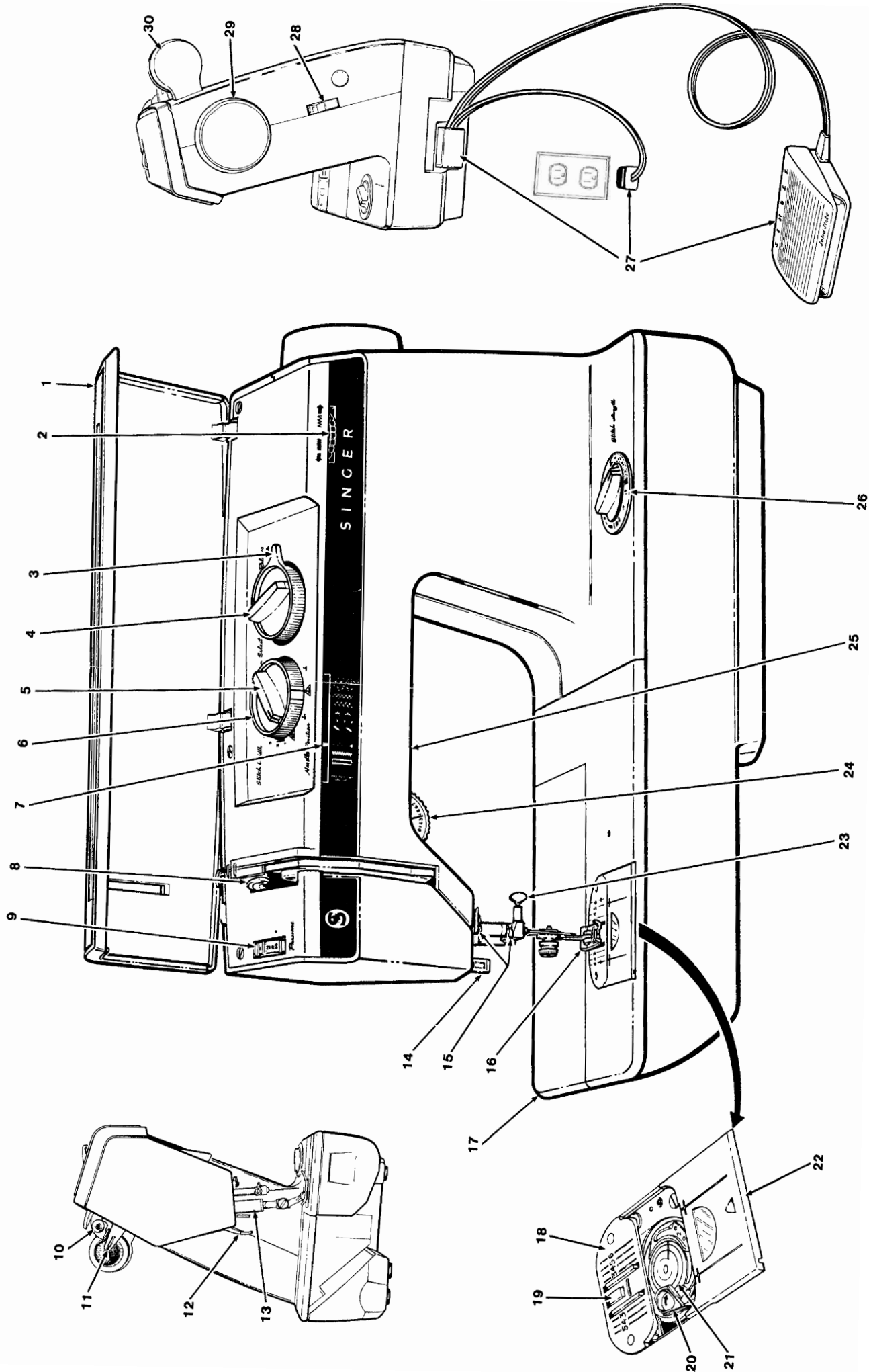


Featherstitching on spandex

## CONTENTS




	Page
<b>1. Getting to Know Your Machine</b> .....	1
Principal Parts and What They Do .....	1
Accessories .....	2
<b>2. Getting Ready to Sew</b> .....	5
Needles .....	6
Choosing Needle and Thread .....	7
Threading the Machine .....	8
Changing the Bobbin .....	10
<b>3. Tips on Straight Stitching</b> .....	12
Adjusting Machine to Your Fabric .....	12
Sewing a Seam .....	14
<b>4. All About Zig-Zag Stitching</b> .....	18
How Stitches are Produced .....	18
Adjusting Stitch Balance When Using <i>Flexi-Stitch</i> Patterns .....	21
<b>5. Twin-Needle Stitching</b> .....	22
Preparation .....	22
Threading the Needle .....	22
Twin-Needle Stitch Chart .....	23
<b>6. Buttons and Buttonholes</b> .....	24
Buttons .....	24
Buttonholes .....	25
<b>7. Sewing the Professional Way</b> .....	31
Construction Details .....	31
Sewing Knit and Stretch Fabric .....	34
Handling Special Fabrics .....	40
Decorative Touches .....	42
Keeping Up Appearances .....	46
<b>8. Free-Arm Sewing</b> .....	48
<b>9. Caring for Your Sewing Machine</b> .....	52
Cleaning the Machine .....	52
Changing the Light Bulb .....	53
Performance Checklist .....	54
<b>10. Sewing Aids</b> .....	55
<b>Your Personal Measurements</b> .....	56
<b>Index</b> .....	58

# 1. GETTING TO KNOW YOUR MACHINE



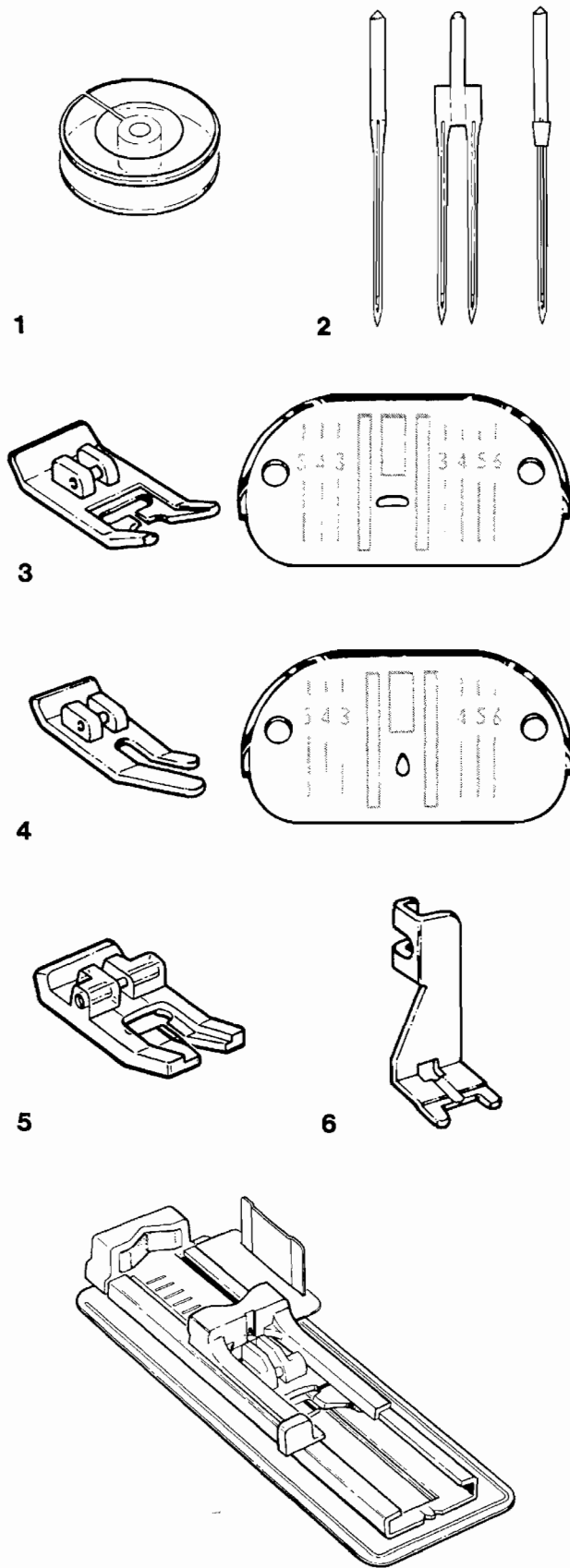


## *principal parts and what they do*

1. **Console Cover** protects against dust, is hinged for easy access to controls.
2. **Stitch-balance Dial** adjusts balance of *Flexi-Stitch* patterns and buttonholes.
3. **Pattern-selector Release Lever** unlocks the pattern selector.
4. **Pattern Selector** controls pointer on stitch panel.
5. **Stitch-width Dial** controls zig-zag stitch width.
6. **Needle-position Ring** places needle in either  (left),  (center), or  (right) stitching position.
7. **Stitch Pattern Panel** pictures stitches and allows for quick selection.
8. **Take-up Lever** controls flow of needle thread.
9. **Pressure Dial** regulates presser-foot pressure on fabric.
10. **Rear Thread Guide** holds needle thread firmly in place while sewing.
11. **Snap-in Thread Guidepost** eliminates possible tangling of thread.
12. **Presser-foot Lifter**, at back of machine, allows you to raise and lower the presser foot.
13. **Thread Cutter** is built into presser bar for safety and convenience.
14. **Buttonhole Lever** sets the machine for buttonholing.
15. **Thread Guides**
16. **Zig-zag Foot** holds fabric against feed.
17. **Flip & Sew\* Panel** converts machine for free-arm sewing.
18. **Zig-zag Plate** secured by magnets. Guidelines on right and left sides help you keep seams straight.
19. **Soft-touch Feed** moves fabric under presser foot. Soft surface does not injure fabric, even the most delicate.
20. **Bobbin Latch** allows you to switch from sewing to bobbin winding without removing bobbin.
21. **Transparent Bobbin** shows thread supply.
22. **Slide Plate** has a window to show bobbin thread supply at a glance.
23. **Needle Clamp** holds single and twin needles. It is designed to eliminate the possibility of inserting needle backwards.
24. **Tension Dial** lets you select just the right tension for your stitch, thread and fabric.
25. **Built-in Sewing Light** illuminates sewing area.
26. **Stitch-length Dial** allows for a variety of stitch lengths. **To reverse stitching**, press dial all the way down and hold in place.
27. **Electrical Connections and Speed Controller**
28. **Power and Light Switch** turns on the machine and the sewing light simultaneously.
29. **Hand Wheel** controls movement of take-up lever and needle.
30. **Friction-free Spool Holder**, with horizontal pin holds spools of various sizes.

## accessories

The accessories that come with your sewing machine are designed to help you do many kinds of sewing easily.



### 1. Transparent Bobbins (No. 181551)

### 2. Needles . . .

- Style 2020 for all-purpose sewing.
- Style 2045 for sewing knits, stretch fabrics and elastic.
- Style 2025† for twin-needle decorative stitching.

### 3. Zig-Zag Foot and Zig-Zag Plate, on your machine when delivered. Use them for alternating between straight and zig-zag stitching as well as utility zig-zag sewing. They can also be used for straight-stitching firm fabrics. Numbers on plate indicate distance from needle in eighths of an inch from center needle position.

### 4. Straight-stitch Foot and Straight-stitch Plate. Use these when your fabric or sewing procedure requires close control. Numbers on plate indicate distance from needle in eighths of an inch.

These accessories, recommended for all straight-stitch sewing, are especially helpful for edge stitching and collar pointing, or for stitching delicate or spongy fabrics.

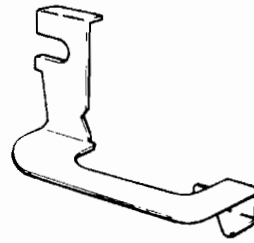
### 5. Special-purpose Foot. Use this for all kinds of decorative stitching.

### 6. Button Foot holds most flat buttons securely for fastening.

### 7. One-Step Buttonhole Foot allows you to stitch a complete buttonhole up to 1-1/2 inches in a single step. It determines the correct buttonhole length, either by placing button in foot or by using gauge lines.

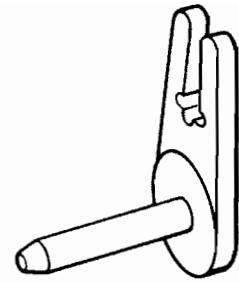
**†CAUTION:** Use this needle with the zig-zag plate and zig-zag foot or special-purpose foot **only**. Do not use any other accessories with this needle as needle breakage will occur.

8. **Blindstitch Hem Guide.** Use this with the zig-zag foot to position and guide the hem.



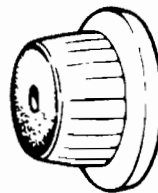
8

9. **Detachable Spool Pin** for decorative twin-needle stitching and two-thread topstitching.



9

10. **Large Spool Holder** on your machine when delivered. For use with medium and large spools of thread.



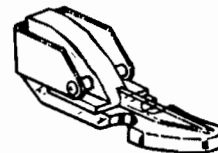
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11. **Small Spool Holder** for use with small diameter tubes of thread.



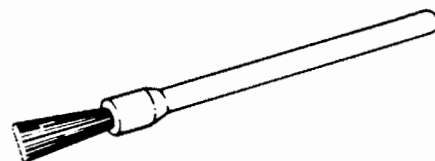
11

12. **Zipper Foot** for inserting zippers and stitching corded seams.



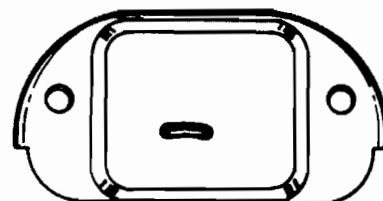
12

13. **Lint Brush** for cleaning your sewing machine.



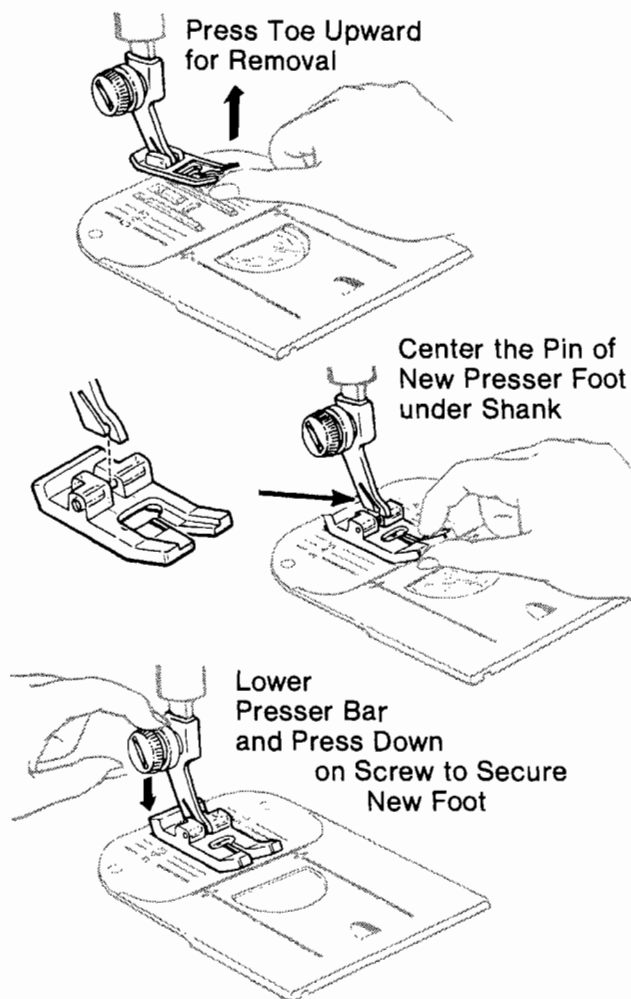
13

14. **Feed Cover Plate** for button sewing and free-motion work.

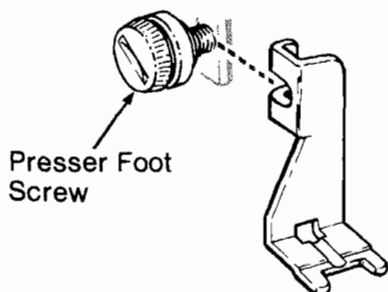


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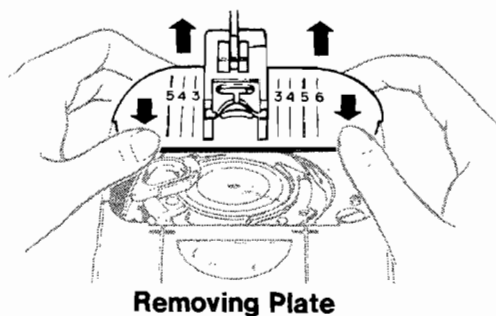




**Changing Snap-on Presser Feet**



**Changing One-Piece Presser Foot**



## CHANGING PRESSER FEET

### Snap-on Presser Feet

Most of the presser feet furnished with your machine snap on and off a common shank.

1. Raise take-up lever to its highest position by turning the hand wheel *toward you*.
2. Raise presser foot.
3. Press toe of presser foot upward (as far as it will go) and then snap down to remove.
4. Center the new presser foot under the shank and lower the presser-foot lifter so that the shank fits over the presser-foot pin.
5. Press presser-foot screw down until foot snaps into place.

To remove and replace the shank of snap-on presser feet, follow instructions below for one-piece presser feet.

### One-Piece Presser Feet

1. Raise needle to its highest position and raise the presser foot.
2. Loosen presser foot screw and remove the foot guiding it to the right.
3. Hook new foot around the presser bar and tighten presser foot screw.

## CHANGING PLATES

(Note: Remove bobbin if it contains thread in order to prevent thread being caught when plate is replaced.)

1. Raise take-up lever to its highest position by turning the hand wheel *toward you*.
2. Raise presser foot.
3. Open slide plate. Press down on front edge of plate and lift up and out.
4. Position new plate over pins and release. Plate is drawn into position by magnets.
5. Close slide plate.

## 2. GETTING READY TO SEW

### CONNECTING MACHINE

Before plugging in your machine, be sure that the voltage and number of amperes indicated at the right end of the machine, conform to your electrical power supply.

- Push the machine plug into the machine socket.
- Connect the power-line plug to your electrical outlet.

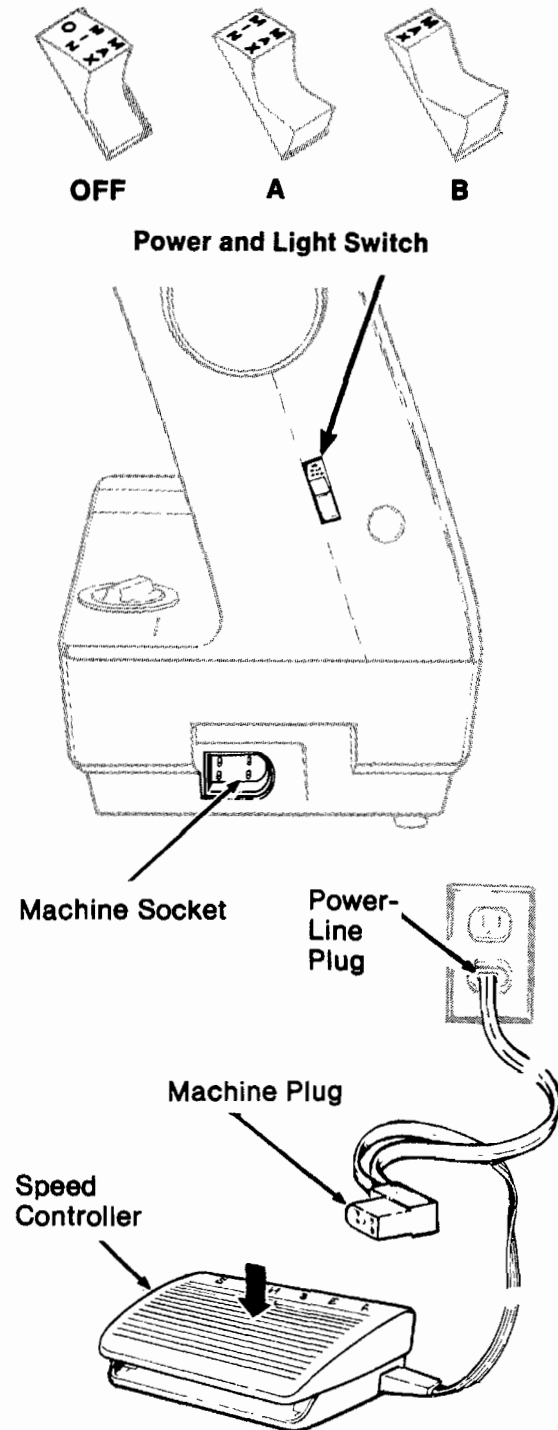
### OPERATING MACHINE

To turn on the machine and sewing light, and set speed range, set the power and light switch in the selected range.

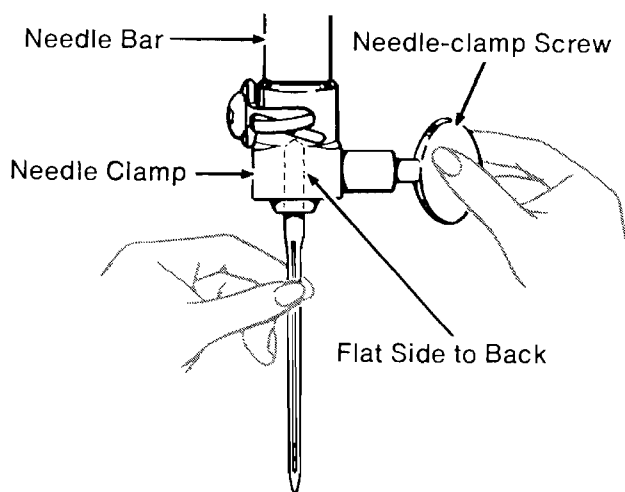
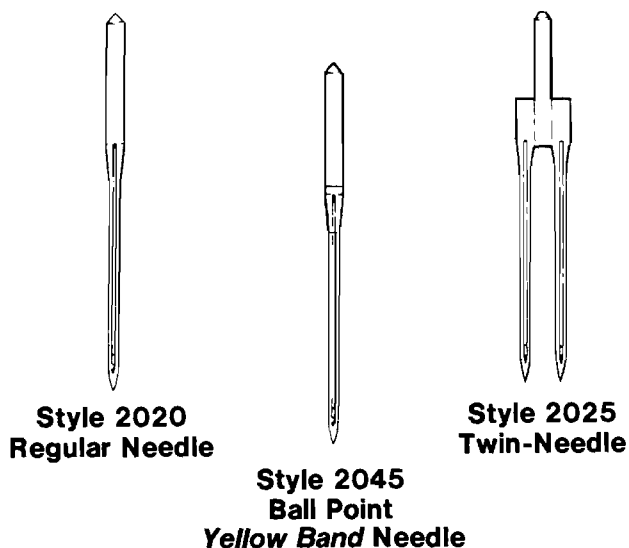
- The **MIN.** setting **A** (switch pressed in half-way) allows for maximum control. Use this setting for special jobs where intricate construction details require close control. The speed range this setting provides is appropriate for almost all of your sewing needs.
- The **MAX.** setting **B** (switch pressed in all the way) allows for full speed capacity of the machine. It is best for long, straight seams, and easy to handle fabrics.

**To run the machine,** press the foot or knee speed controller. The harder you press, the faster the machine will sew within the selected speed range. The lighter you press, the slower the machine will sew within the selected speed range.

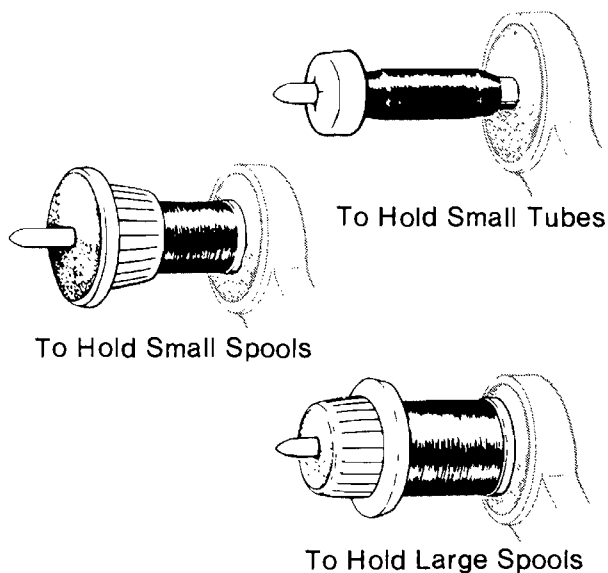
**CAUTION:** Switch off the power and light switch when changing needles, feet or needle plates or when leaving the machine unattended. This eliminates the possibility of starting the machine by accidentally pressing the speed controller.



Connecting and Operating Machine



Changing the Needle



## needles

The needle you use should be straight and not bent to ensure perfect stitch formation and needle penetration through the fabric. The needle should also be fine enough to prevent the fabric from being marred with large punctures, yet heavy enough to pierce the fabric without being bent or deflected. Remember, too, that the eye of the needle must be large enough for the thread to pass through freely; too fine a needle will cause the thread to fray.

**IMPORTANT:** Your SINGER sewing machine has been designed to obtain best results with SINGER\* needles. You should follow the recommendations in this instruction book and on the needle package for correct style and size of needle for different types and weights of fabric.

- Style 2020 (15x1) needles, for all-purpose sewing.
- Style 2045 ball-point *Yellow Band*\* needles, for sewing synthetic knits and stretch fabrics.
- Style 2025 needle, for twin-needle decorative stitching.

## CHANGING THE NEEDLE

1. Raise needle to its highest point by *turning the hand wheel toward you*. Loosen needle-clamp screw, and remove the needle.
2. Insert new needle in clamp, with the flat side of the needle to the back; push it up as far as it will go.
3. Tighten needle-clamp screw.

## SPOOL HOLDER

Place spool or tube of thread on horizontal spool pin. If spool has a retaining slit, the slit should be placed against the spool cushion to the right. Select correct spool holder according to the type and diameter of spool being used. The diameter of the end of the spool holder should always be larger than that of the spool itself. Press holder firmly against spool to prevent it from turning.

## choosing needle and thread

The needle and thread you choose will depend upon the fabric being stitched. The table below is a practical guide to needle and thread

selection. Refer to it before starting a sewing project. Be sure to use the same size and type of thread in both needle and bobbin.

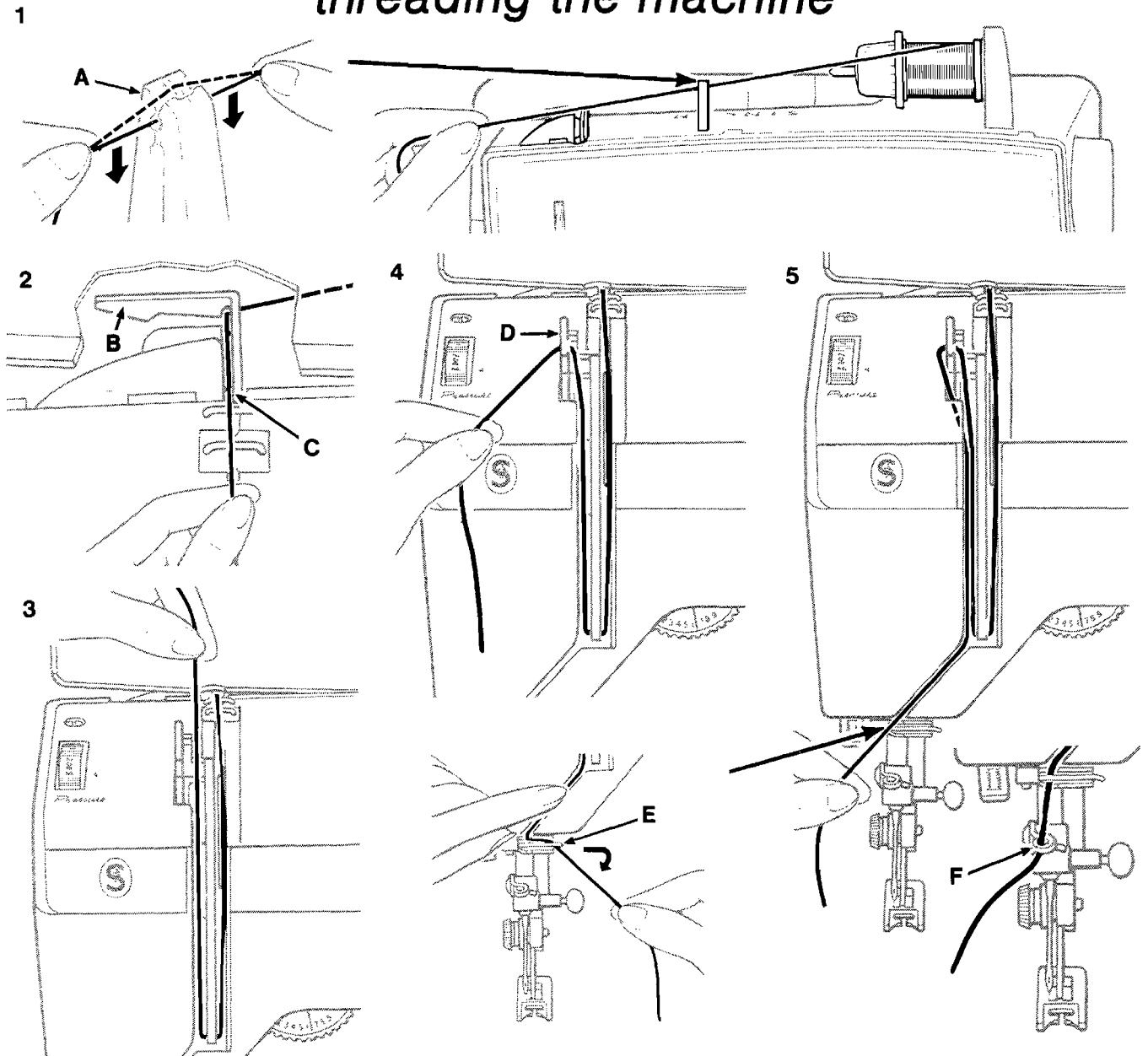
**FABRIC, THREAD AND NEEDLE TABLE**

FABRIC WEIGHT AND TYPE	THREAD	NEEDLES	
		TYPE	SIZE
DELICATE — tulle, chiffon, fine lace, organza, chiffon velvet	Fine polyester, nylon, or cotton thread	Style 2020 (15x1)	9†
LIGHTWEIGHT — batiste, organdy, voile, taffeta, crepe, chiffon velvet, plastic film, satin, surah, peau de soie, shantung, brocade	Cotton-wrapped polyester (FINE)	Style 2020 (15x1)	11
	100% polyester		
	50 mercerized cotton		
MEDIUM WEIGHT — gingham, seersucker, madras, percale, piqué, linen, chintz, faille, fine corduroy, velveteen, suitings, vinyl, terry cloth, challis, twill	"A" nylon	Style 2020 (15x1)	14
	"A" silk		
	Cotton-wrapped polyester		
MEDIUM HEAVY — gabardine, tweed, sailcloth, duck, denim, coatings, drapery fabrics, vinyl, deep-pile fabrics, corduroy, bonded fabric	100% polyester	Style 2020 (15x1)	16
	50 mercerized cotton		
	60 cotton		
HEAVY — overcoatings, upholstery fabrics, canvas	"A" silk	Style 2020 (15x1)	18
	Cotton-wrapped polyester		
	Heavy-duty mercerized cotton		
KNITS, WOVEN STRETCH AND ELASTIC — double knits, bonded knits, spandex, nylon tricot, ciré tricot, jersey, panné velvet, stretch terry	40 cotton	Style 2020 (15x1)	14
	Cotton-wrapped polyester		
	100% polyester		
LEATHER — suede, kidskin, calf, capeskin, buckskin, cabretta, patent, cobra, lined leathers, simulated leathers	"A" nylon	Style 2045 Ball Point <i>Yellow Band</i>	14
	50 mercerized cotton		
	"A" silk		
VINYL (KNIT BACK) — suede, imitation reptile, crinkle patent, patent, embossed and printed vinyls	"A" silk	Style 2032 (15x2)	11
	Cotton-wrapped polyester		
	100% polyester		
WOVEN FABRICS (ALL WEIGHTS) — decorative straight-stitch topstitching	50 mercerized cotton	Style 2045 Ball Point <i>Yellow Band</i>	14
	"A" nylon		
	"A" silk		
LIGHT AND MEDIUM WEIGHTS (WOVEN) — decorative twin-needle stitching	"D" silk†† (Buttonhole twist)	Style 2020 (15x1)	16
	Cotton-wrapped polyester		
	100% polyester		
	50 mercerized cotton	Style 2025 (twin)	14

†Size 9 needle recommended for sewing only. For bobbin winding, use larger size needle.

††Use with mercerized cotton, "A" silk, or polyester thread in bobbin.

# threading the machine






## THREADING

- Raise take-up lever to its highest position by turning hand wheel toward you. **Raise presser foot to release the tension discs.**
- 1. Lead thread from spool holder and snap it down into thread guidepost **A**.
- 2. Raise console cover and thread the rear thread guide by holding thread in left hand and guiding it over wing **B** and into channel **C**.
- 3. Draw thread *firmly* between tension discs, down right-hand channel, and up left-hand channel.
- 4. Thread take-up lever **D** by guiding thread down over top of lever and then up into eyelet.
- 5. Lead thread from take-up lever down into left channel and then into lower thread guides **E** and **F**.
- Thread the needle from front to back and draw about 4 inches (10cm) of thread through eye of needle. A needle threader may be purchased separately at your local Singer Sewing Center.

## WINDING THE BOBBIN

You will find a bobbin in place under the slide plate of your machine. (To open slide plate, simply draw it gently toward you.) If the bobbin runs out of thread during sewing, you can re-wind it without removing it from the machine. The window in the slide plate lets you see bobbin-thread supply at a glance, to help avoid running out of thread in the middle of a seam.

### Preparation Steps

1. Raise the take-up lever to its highest position by pressing lightly on the speed controller or by turning the hand wheel toward you.
2. Raise the presser foot to release tension discs.
3. Open slide plate and make sure bobbin is empty. For removal of bobbin and thread, see page 10.
4. Set pattern-selector release lever by turning it clockwise, see page 12, and set stitch control dials for straight stitching: stitch pattern , needle position  (center) and stitch width .

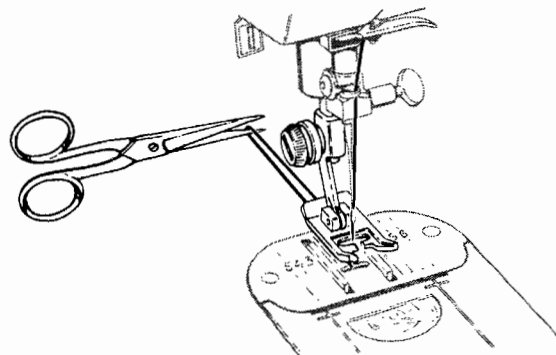
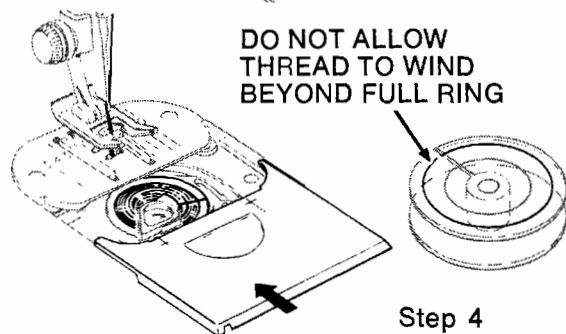
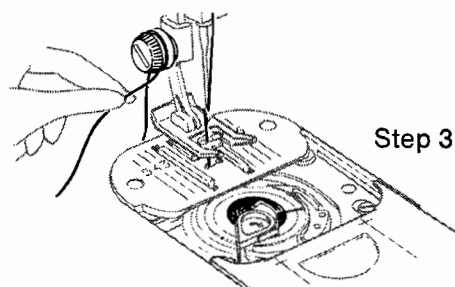
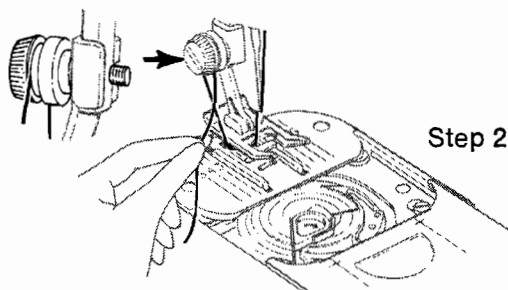
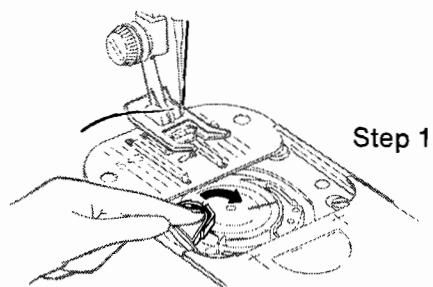
If pattern-selector release lever fails to lock into place, turn the hand wheel slightly toward you and then reset lever.

### Winding Steps

1. Move bobbin latch to right (wind position).
2. Draw needle thread back between toes of presser foot, under left side of presser foot, then up, into and around thread retainer, as shown. **Do not hold thread end.** Start the machine, running it at a moderate speed.
3. Pull thread end away after it has separated from bobbin.
  - Keep your eye on the bobbin as it fills. Do not allow thread to wind beyond the outside FULL ring.
4. Close slide plate to release bobbin latch to sewing position.

**To start sewing,** pull thread back under presser foot and cut. Place threads diagonally under foot to right or left side, position needle in fabric where desired, lower presser foot, and start machine.

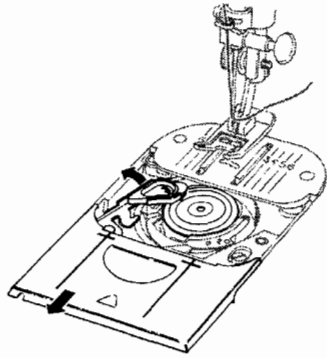
### Winding Steps



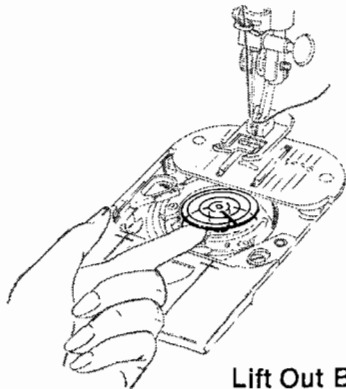
Cutting Continuous Thread



### Removing Bobbin

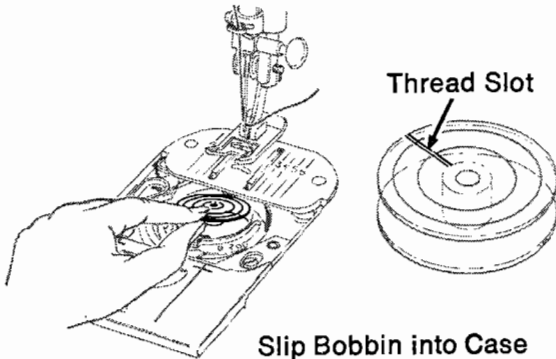


Open Slide Plate and Move Bobbin Latch to Left



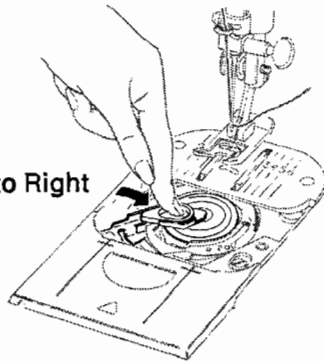
Lift Out Bobbin

### Replacing Empty Bobbin



Slip Bobbin into Case

Move Bobbin Latch to Right  
(Wind Position)



## changing the bobbin

### REMOVING THE BOBBIN

*Raise take-up lever to its highest position.*

1. Open slide plate; move bobbin latch to left.
2. Remove bobbin by inserting fingernail under rim of bobbin.

### REPLACING AN EMPTY BOBBIN

1. Slip bobbin (slot on top) into bobbin case.
2. Move bobbin latch to right (wind position).
3. Leave slide plate open until you have finished winding the bobbin.

### REMOVING THREAD FROM BOBBIN

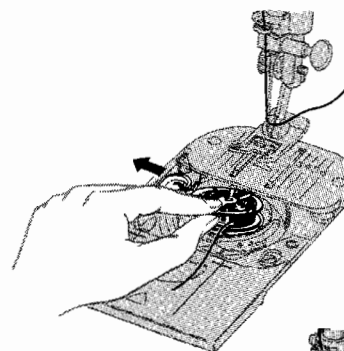
You can leave the bobbin in place while removing thread. With slide plate closed, pull thread end through the plate with a steady motion. Do not pull the thread across the feed as this may damage it.

## Replacing a Wound Bobbin

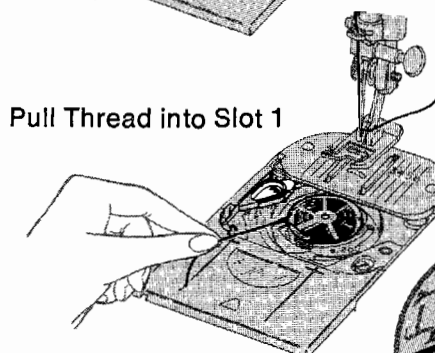
### REPLACING A WOUND BOBBIN

*Raise take-up lever to its highest position.*

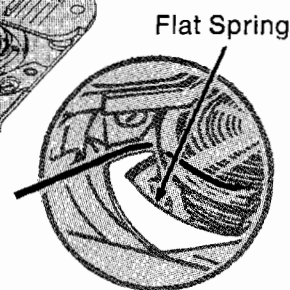
1. Open slide plate; move bobbin latch all the way to the left.
2. Draw about an inch of thread from bobbin and place bobbin in case.
3. Pull thread into bobbin-case slot (point 1), draw it under flat spring and around to (or slightly past) point 2, leaving two or three inches of free thread. (Leave slide plate open.)



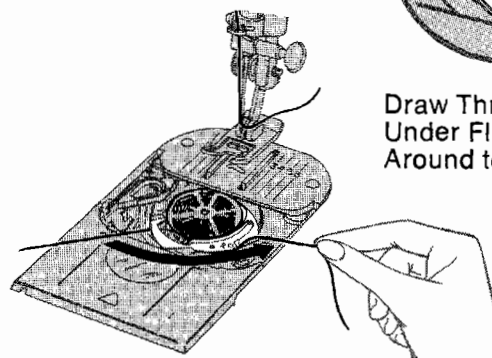
Insert Bobbin



Pull Thread into Slot 1



Flat Spring



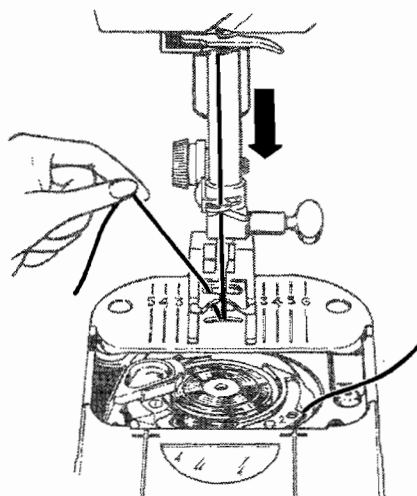
Draw Thread Under Flat Spring Around to Point 2

### RAISING THE BOBBIN THREAD

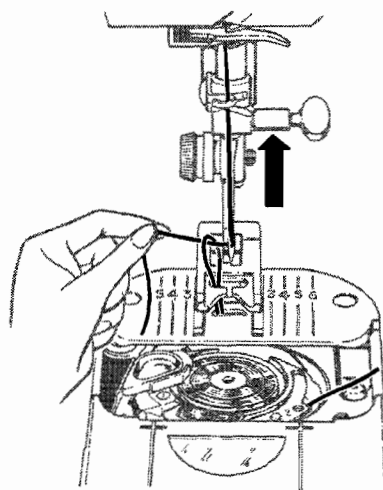
*Set stitch width dial at .*

1. Move bobbin latch to right (sewing position). Hold needle thread lightly with left hand and turn hand wheel slowly toward you so the needle enters plate.
2. Continue turning hand wheel and holding needle thread until needle rises. Tighten your hold on the needle thread and bring up bobbin thread in a loop.
3. Open the loop with your fingers, draw needle and bobbin threads under the presser foot and place them diagonally to right or left. Then close the slide plate.

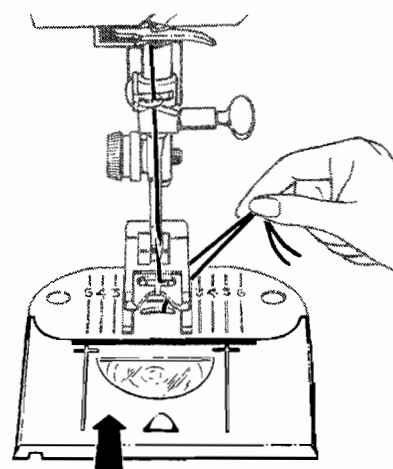
### Raising the Bobbin Thread



Step 1



Step 2

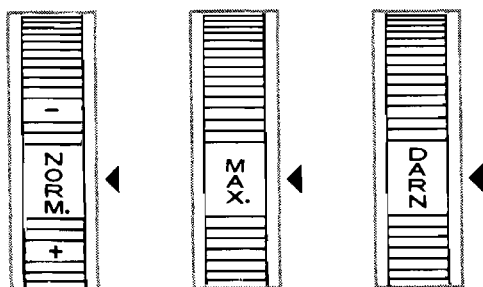
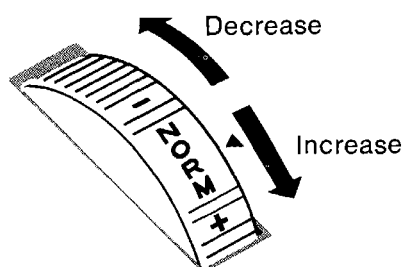
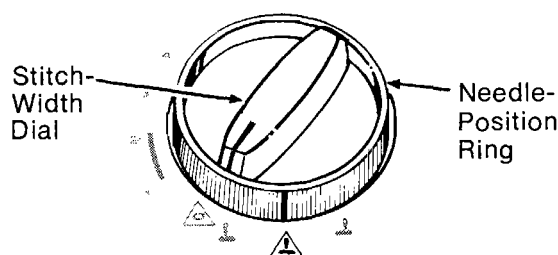
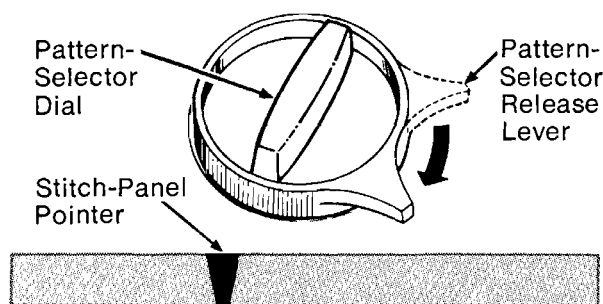


Step 3

### 3. TIPS ON STRAIGHT STITCHING

*adjusting machine to your fabric*

#### Straight-Stitch Settings



Pressure Dial

#### SETTING CONTROLS

1. Set pattern-selector release lever by turning it clockwise until it locks in place. If lever fails to lock, turn hand wheel slightly and reset lever.

**NOTE:** Do not attempt to turn pattern-selector release lever after it is locked in place. It repositions itself when you start the machine or turn the hand wheel.

2. Turn pattern-selector dial until stitch-panel pointer is above setting.
3. Turn stitch width dial to and turn needle position ring to (center).
4. Attach straight-stitch foot and straight-stitch plate (see page 4).

**NOTE:** When alternating between straight and zig-zag stitching use the zig-zag foot and zig-zag plate, and set pattern selector on zig-zag setting .

#### REGULATING PRESSURE

The pressure dial regulates the pressure that the presser foot exerts on the fabric. The NORM (normal) setting can be used for sewing a wide variety of fabrics of different weight and texture. Intermediate settings, above and below NORM, are also provided. Generally *lighter than normal* pressure is best for heavy or dense fabrics. See page 35 for adjusting pressure when sewing knits.

*Lower the presser foot before setting pressure.*

- To increase pressure, turn dial from **NORM** toward **MAX**.
- To decrease pressure, turn dial from **NORM** toward **DARN**.
- For darning, set dial on **DARN**.

## Regulating Needle-thread Tension

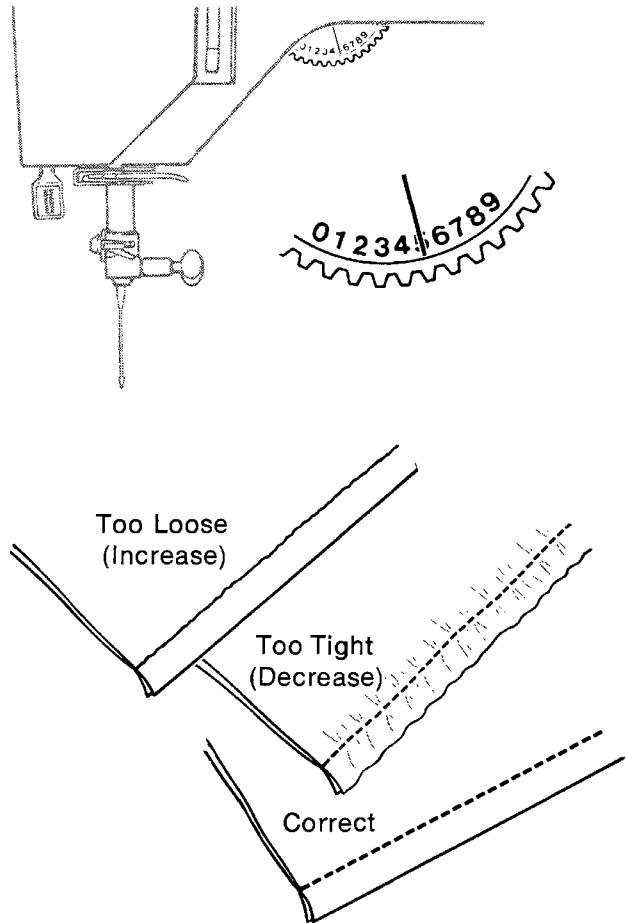
### REGULATING NEEDLE-THREAD TENSION

The tension dial regulates the degree of tension on your needle thread and lets you select just the right setting for your stitch, thread, and fabric. The numbers on the dial eliminate guesswork in duplicating settings.

Correct tension is important because too much or too little will weaken your seams. To find the correct tension setting, make a test on a sample of your fabric. If the fabric puckers or the bobbin thread is pulled to the fabric surface, decrease tension. If the surface or underside stitches look loose, increase tension.

- **To increase tension**, turn dial to a higher number.
- **To decrease tension** turn dial to a lower number.

**NOTE:** *The tension dial controls needle-thread tension only. Bobbin-thread tension has been correctly set at the factory, and you do not need to adjust it.*

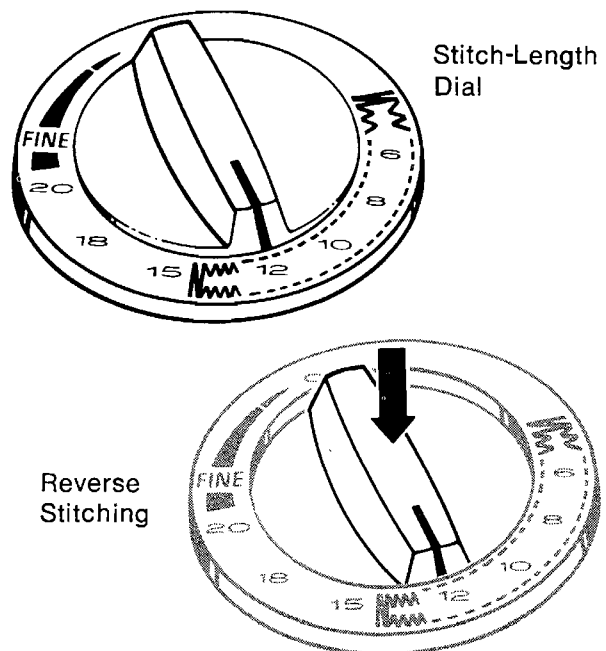


## Setting Stitch Length

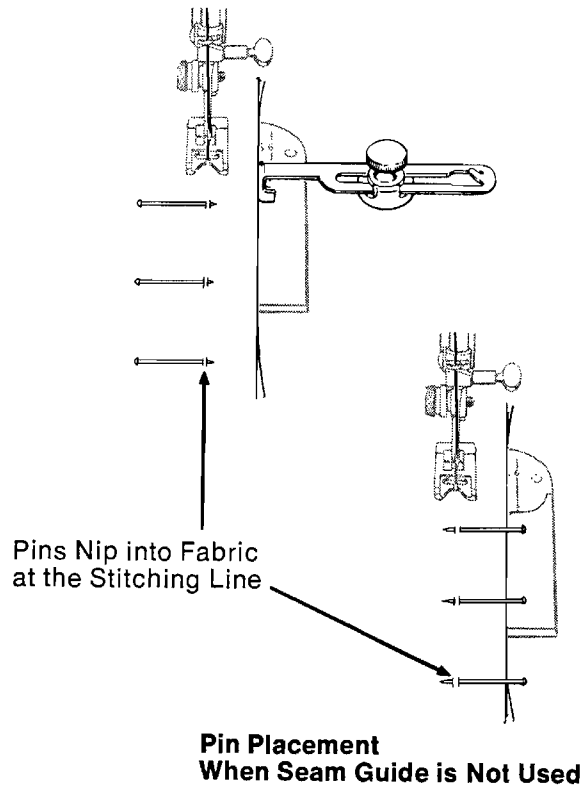
### SETTING STITCH LENGTH

The stitch-length dial regulates the length of both straight and zig-zag stitches. The numbers **6** to **20** represent the number of straight stitches per inch: *the higher the number, the shorter the stitch*. Generally, shorter stitches are best for lightweight fabric; longer ones for heavy fabric. Curved seams, bias-cut seams, and scallops require short straight stitches (**15** to **20**) for elasticity and smooth contours. Bound buttonholes should be sewn with a short stitch for durability and strength.

- **To set stitch length**, turn dial to setting desired.
- **For reverse stitching**, press dial all the way down and hold in place.



### Pin Placement When Seam Guide is Used

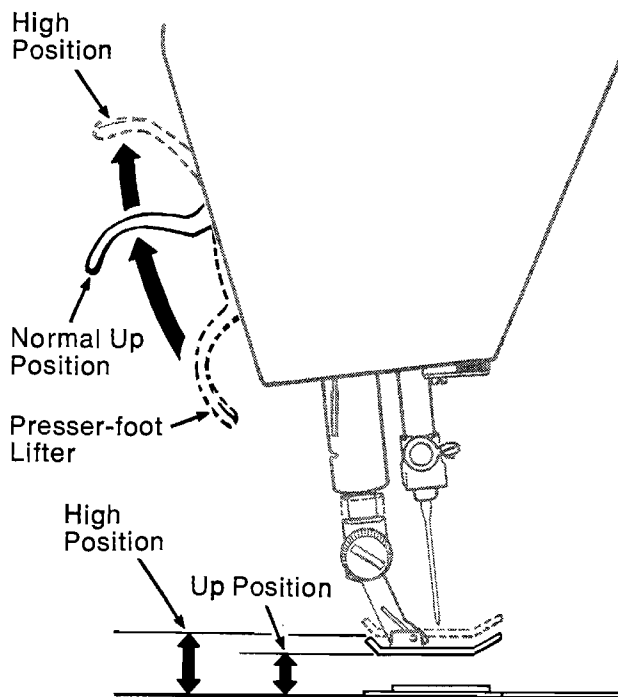


## sewing a seam

### PIN BASTING

Pin basting is a time saver and can be used when you sew easy-to-handle fabric. Use fine pins and place them so that:

- They are at right angles to the presser foot and just nip into the fabric at the stitching line.
- They do not extend under both sides of the presser foot. *Never place pins on the underside of the fabric in contact with the feed.*
- Sew, pulling pins out of fabric as you stitch. We do not recommend sewing over pins.



Presser-foot Lifter Settings

### PLACING FABRIC

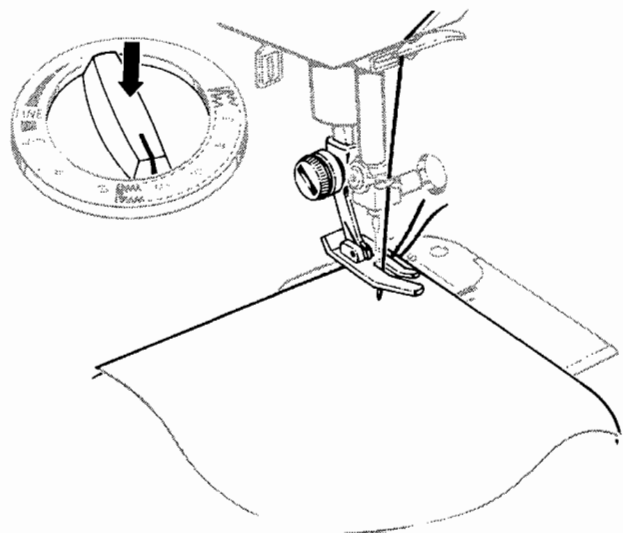
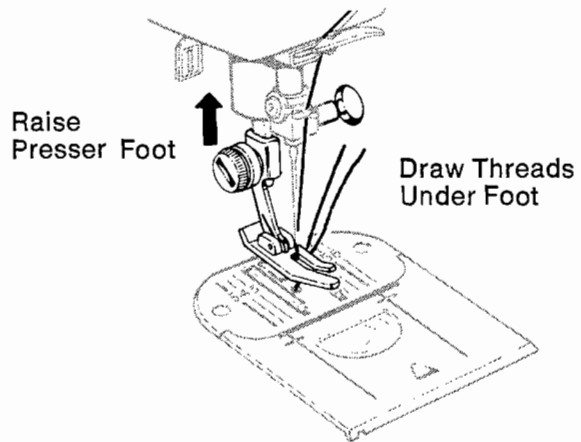
Most fabric can be placed under the presser foot by raising the presser-foot lifter to its up position. When placing bulky fabrics, such as coating, knit or terry cloth, or several fabric layers, raise the presser-foot lifter to its high position and make sure needle is at its highest point. Hold lifter in position (since it does not lock) while placing fabric under the presser foot. Make sure the lifter is all the way down before starting to sew.

## STARTING THE SEAM

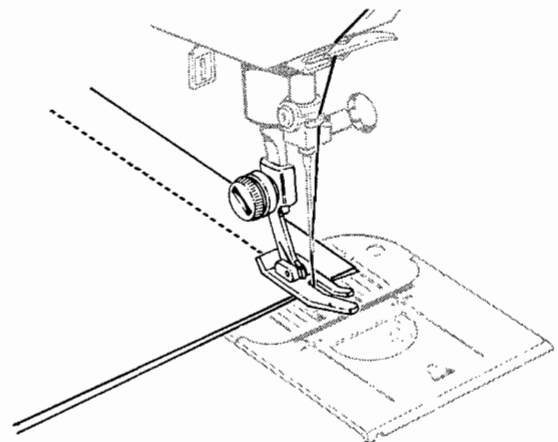
Always test-stitch seams on fabric scraps before stitching your garment. This will enable you to get the feel of handling the fabric. Also, it will indicate whether tension, pressure, stitch length, needle and thread are correct.

To avoid tangled threads on the underside of the fabric, it is important to start and end seams carefully.

- Raise the take-up lever to its highest position by turning the hand wheel toward you or pressing lightly on the speed controller. Raise presser foot.
- Draw needle and bobbin threads under foot and place them diagonally to right.
- Hold thread ends and with a light touch on the speed controller or by turning the hand wheel toward you, position needle in fabric about  $\frac{1}{2}$  inch from fabric edge.
- Lower the presser foot.
- Press stitch-length dial all the way down and hold in place.
- Start machine and backstitch to edge of fabric. (Do not sew beyond edge of fabric.)
- Release the stitch-length dial and sew in forward direction.

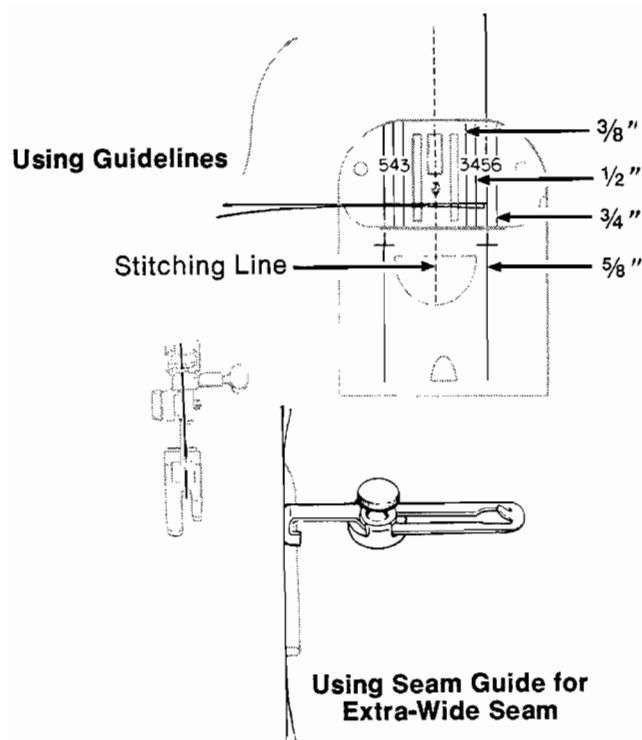


**Starting Away from Fabric Edge**



**Stitching to End of Seam**

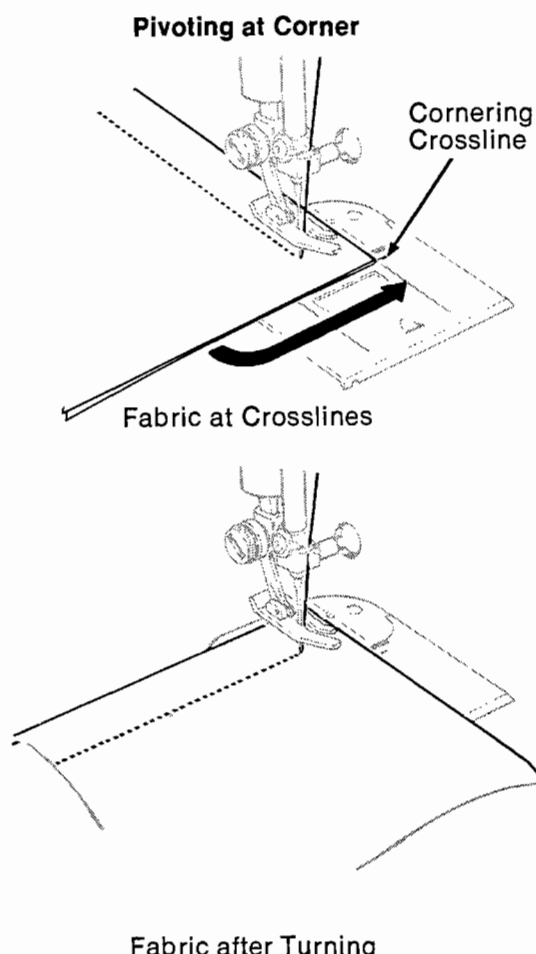




## KEEPING SEAMS STRAIGHT

To keep the seam straight, use one of the numbered guidelines on the plate. The numbers indicate distance, in eighths of an inch, from the needle. If you want a 5/8-inch seam, for example, line up your fabric with the number 5 guideline. Note that both number 5 guidelines (the most commonly used) are extended on the slide plate for your convenience; the crosslines serve as guides when stitching a square corner.

For extra help in keeping the seam straight, you may wish to use the seam guide available for separate purchase at your Singer Sewing Center. Because it allows you to guide stitches evenly between 1/8-inch and 1-1/4 inches from the fabric edge, it is particularly useful for very narrow or very wide seams.



## TURNING SQUARE CORNERS

To turn a square corner 5/8-inch from the fabric edge, you need not measure or mark the seam. Simply use the crosslines on the slide plate.

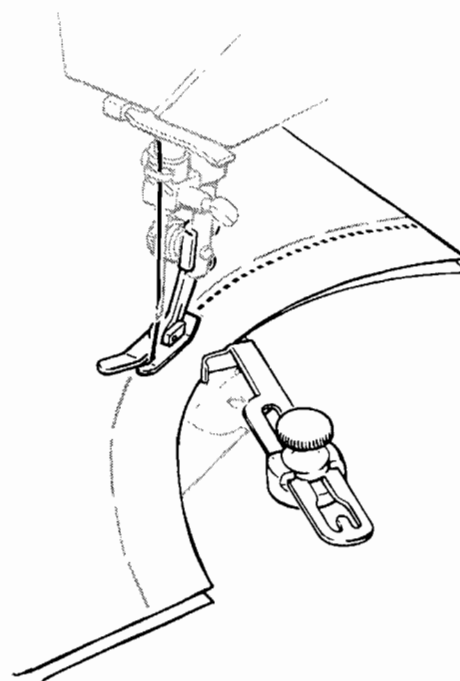
- Line up your fabric with right or left guideline 5 on the plate. Stitch seam, slowing speed as you approach corner.
- Stop stitching, *with the needle down*, when the bottom edge of the fabric reaches the cornering crosslines on the slide plate.
- Raise presser foot *slightly* and turn fabric on needle, bringing bottom edge of fabric in line with guideline 5.
- Lower the presser foot and stitch in new direction.

## CURVED SEAMS

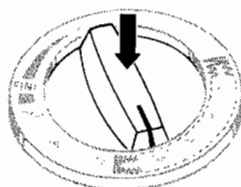
1. Use a short stitch for elasticity and strength. For example, if you use 12 stitches to the inch for straight seams, select 15 to 20 stitches per inch to stitch curved seams in the same fabric.
2. If you use the seam guide, available for separate purchase at your Singer Sewing Center, attach it at an angle so that the edge that is closer to the needle acts as a guide.

## REINFORCING END OF SEAM

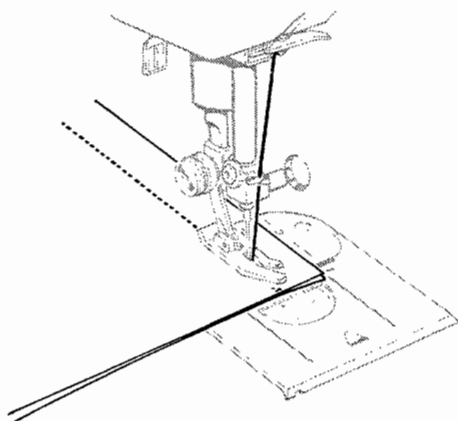
1. Stitch to the edge of the fabric. (Do not sew beyond edge of fabric.)
2. Press stitch-length dial all the way down and hold in place. Backstitch approximately 1/2-inch to reinforce end of seam. Release stitch-length dial.
3. Raise take-up lever to its highest position and raise presser foot. Remove the fabric by drawing it to the back and left.
4. Cut threads on thread cutter at rear of presser bar.



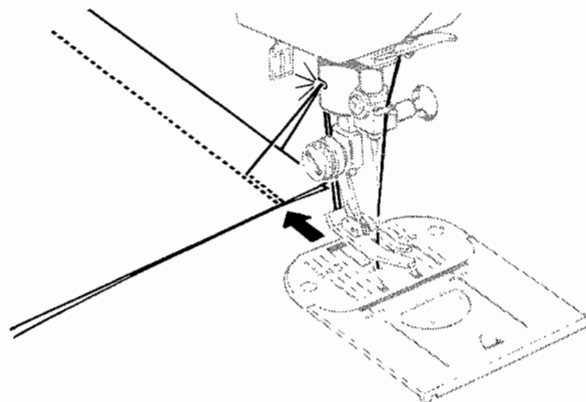
Stitching a Curved Seam



Reverse Stitching



Ending a Seam



Cutting Threads

## 4. ALL ABOUT ZIG-ZAG STITCHING

### *how stitches are produced*

All stitches are produced by discs. *Fashion* Stitch discs control the side-to-side movement of the needle; *Flexi-Stitch* discs control both the side-to-side movement of the needle and the back-and-forth movement of the feed.

Your sewing machine has eleven built-in discs. These discs can produce five *Fashion* Stitch patterns (white), and five *Flexi-Stitch*

patterns (yellow), and a straight stitch.

In addition to the obviously decorative uses of the stitch patterns, some serve very practical purposes. In the section called "Sewing the Professional Way," beginning on page 31, you will find instructions for both decorative and practical uses of these patterns.

### *built-in stitches*

The eleven discs built into your sewing machine produce the stitches illustrated



**Lace Stitch.** A decorative pattern for single needle work.



**Plain Zig-Zag Stitch.** Used for general-purpose stretch sewing, buttonholes, attaching buttons, bar tacks, and appliqué.



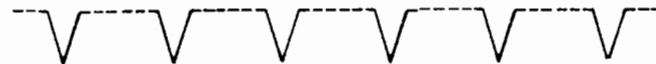
**Straight Stitch.** For seaming and speed basting.



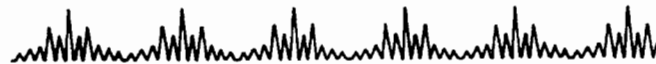
**Multi-stitch Zig-Zag.** Lets you mend, join, and reinforce without bulk.



**Ribbon Stitch.** A decorative pattern for single- and twin-needle work.



**Blindstitch.** Indispensable for finishing hems.



**Icicle Stitch.** Perfect for ornamental borders and edges.



**Featherstitch.** Extremely versatile. Use it for stretchable straight-stitch seams in knit and stretch fabrics and for fagoting, embroidering, and quilting.



**Honeycomb Stitch.** Ideal for smocking and useful for mending, overcasting, and attaching elastic and stretch lace.



**Leaf Stitch.** For decorative stitching.

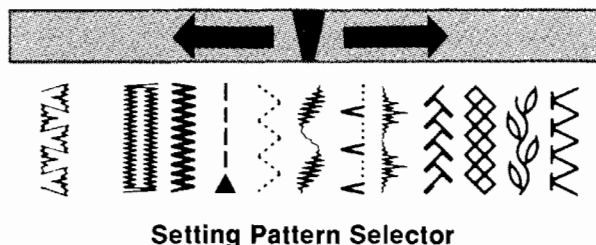
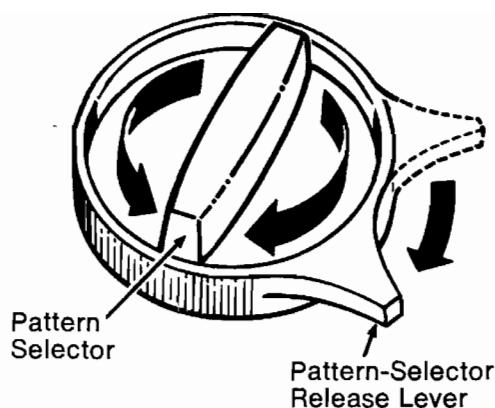


**Overedge Stretch Stitch.** Used for joining and overedging seams in knit and stretch fabrics in one operation.




## SETTING PATTERN SELECTOR


Turn pattern-selector release lever toward you until it locks in place. Then turn pattern selector until pointer on panel is above desired stitch.

**NOTE:** If pattern-selector release lever fails to lock, turn hand wheel slightly toward you and reset lever. *Do not attempt to turn the release lever after it is locked in place.* It will reposition itself when you start the machine or turn hand wheel.

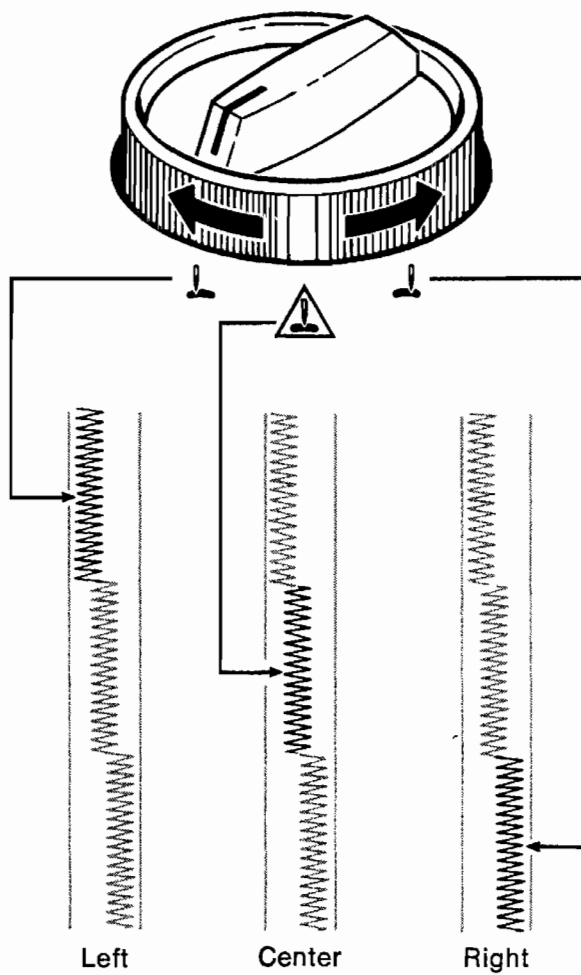


## ADJUSTING STITCH PLACEMENT

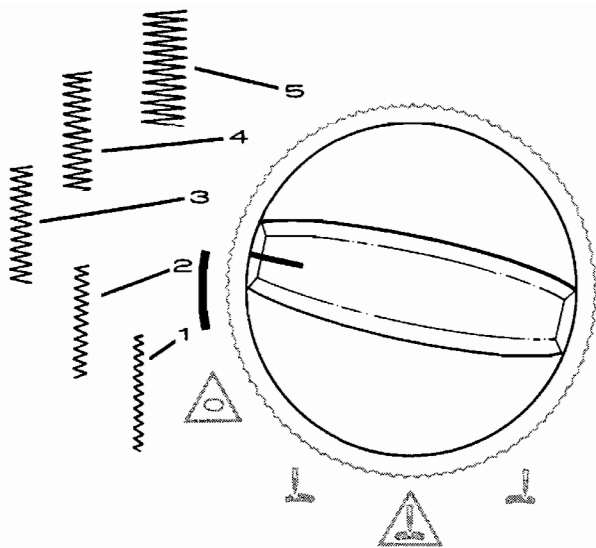
Needle-position setting  places the needle in center stitching position. Settings  and  place the needle in left and right stitching position at stitch widths less than 5.

Center setting  is used most often. Right  is required for buttonholing and left  for button sewing or  setting can be used for placing narrow zig-zag stitching to the left or right of center in decorative work.

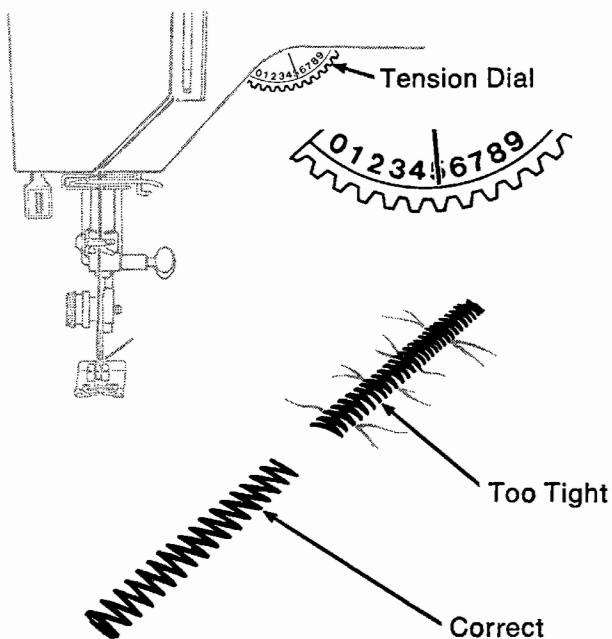
**To set needle position,** turn ring until desired setting is aligned with indicator line on ring.



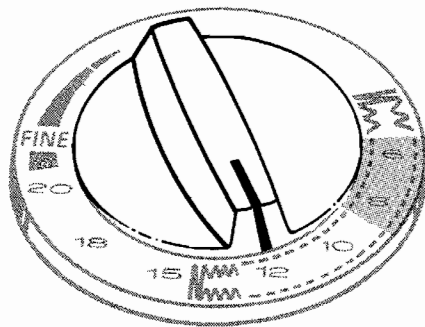
Adjusting Stitch Placement



**Adjusting Width**



**Needle-thread Tension**



**Stitch-Length Dial**

## ADJUSTING STITCH WIDTH

To produce a zig-zag stitch, turn the stitch-width dial to any setting between **1** and **5**. The higher the number, the wider the stitch.

## ADJUSTING NEEDLE-THREAD TENSION

Generally, zig-zag stitching at open stitch lengths requires the same needle-thread tension as straight stitching. *Flexi-Stitch* patterns, however, may require more needle-thread tension than *Fashion* Stitch patterns. Make a test sample with the fabric and thread you plan to use so that you can adjust the tension to suit the stitch you have chosen. The stitches should lie flat against the fabric without causing the fabric to pucker.

If the stitches are not flat and the fabric is puckered, lower the needle-thread tension by turning the tension dial to a lower number.

For tension adjustment of *Fashion* Stitch patterns at satin-stitch length, turn to page 42.

## ADJUSTING STITCH LENGTH

### For *Fashion* Stitch Patterns

Any stitch length setting from **6** to **20** will give you an open zig-zag stitch of the pattern you select. The lower the number, the more open, or farther apart, your stitches will be. The symbol on the dial above **20** designates the **FINE** stitch area and is used for adjusting satin stitching (see page 42 for specific instructions).

### For *Flexi-Stitch* Patterns

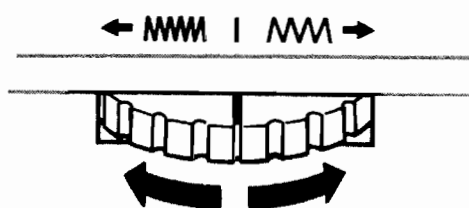
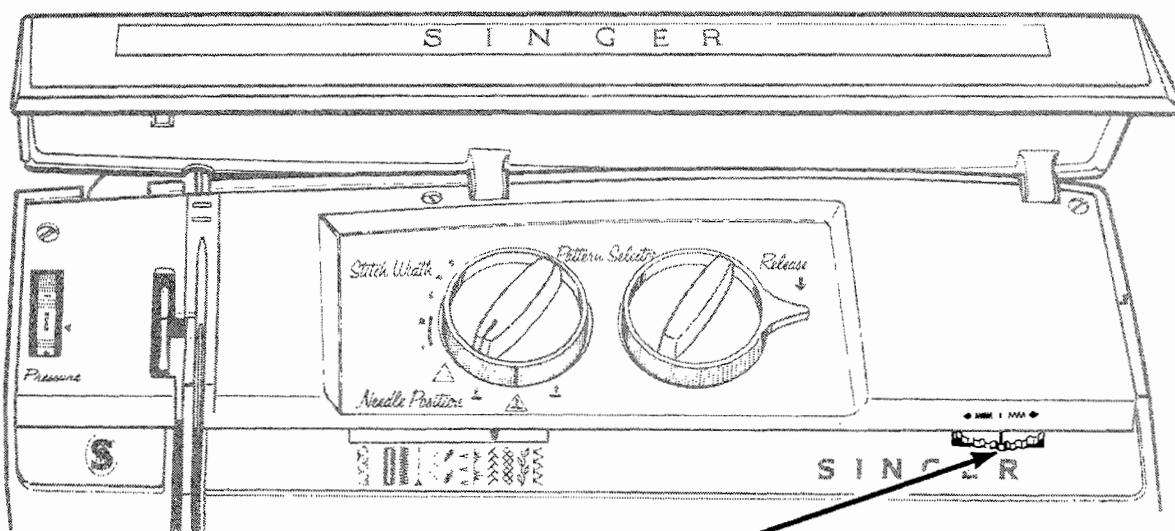
When you use a *Flexi-Stitch* pattern, set the stitch length dial in the **6** to **8** area indicated by the yellow band. The higher the number, the shorter your stitches will be. Dial numbers in this case do not represent length of stitches per inch.

*Stitching cannot be reversed when using a **Flexi-Stitch** pattern.*

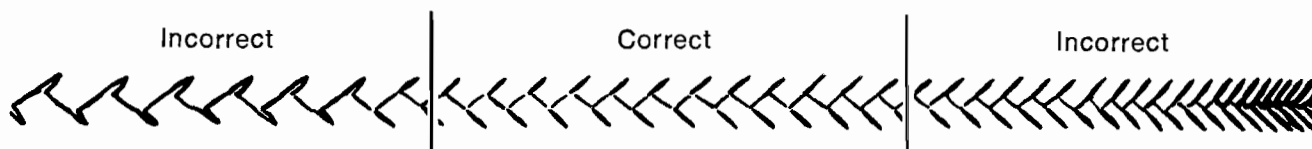
## adjusting stitch balance when using Flexi-Stitch patterns

When using a *Flexi-Stitch* pattern, you may need to adjust the stitch-balance dial to correct the appearance of the stitch.

Before you move the stitch-balance dial from its neutral position, make a test sample. If adjustment is required, stitch slowly and move the stitch-balance dial as you sew.



**Stitch-Balance Dial**



Turn the dial slowly to *left* (←MMM symbol) to bring forward and reverse stitches of the pattern together.

Turn the dial slowly to *right* (MMM→ symbol) to separate forward and reverse stitches of the pattern.



## 5. TWIN-NEEDLE STITCHING

By using a twin needle, you can produce simultaneously two parallel, closely spaced lines of straight or zig-zag stitching. Effective for decoration, twin-needle stitching is not recommended for seams or for use on knits. Soft fabrics should be sewn with a paper or fabric backing.

### *preparation*

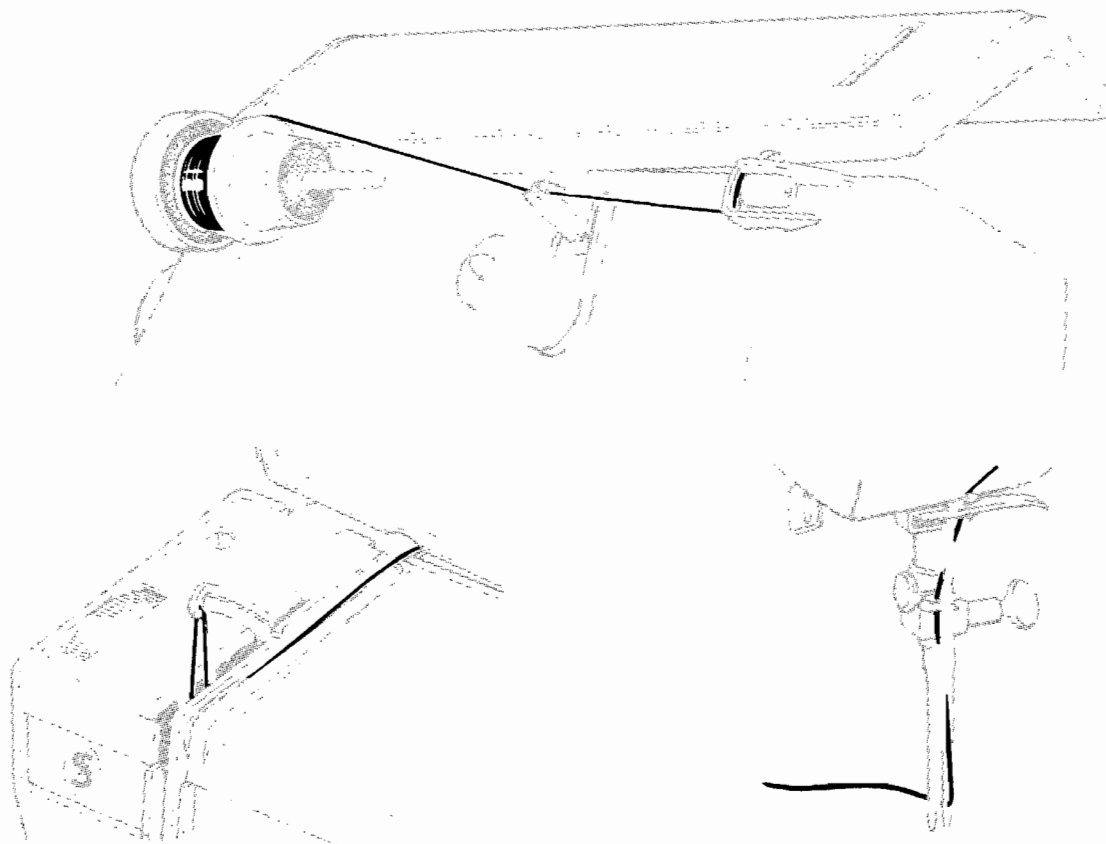
1. Clip detachable spool pin to guide post as shown.
2. Thread machine as instructed on page 8, making certain thread passes on **right** side of tension disc.
3. Wind bobbin with enough thread to complete stitching. (Since a bobbin cannot be filled after a twin needle is inserted, it is wise to keep an extra wound bobbin at hand for replacement.)

**NOTE:** When inserting a previously wound bobbin, follow the instructions on page 11.

4. Close slide plate and raise bobbin thread.
5. Cut thread about four inches from needle, and unthread the needle.
6. Remove the single needle and insert the twin needle.

### *threading the needle*





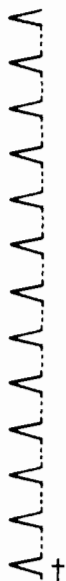













1. Pass thread through **right** eye of needle.
2. Place spool of thread on detachable spool pin and thread machine as for one-needle stitching *except*:
  - Pass thread on **left** side of tension disc.
  - Thread through remaining points making certain to omit the thread guide above the needle and pass thread through **left** eye of needle.



## twin-needle stitch chart

To produce patterns at right, use settings, discs and accessories shown below.

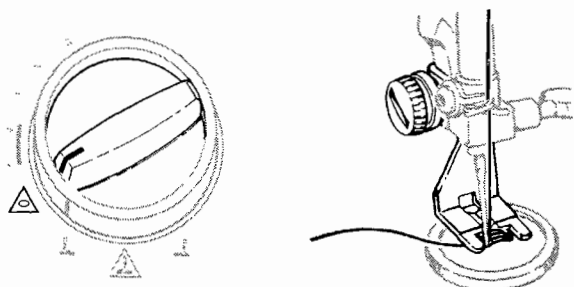
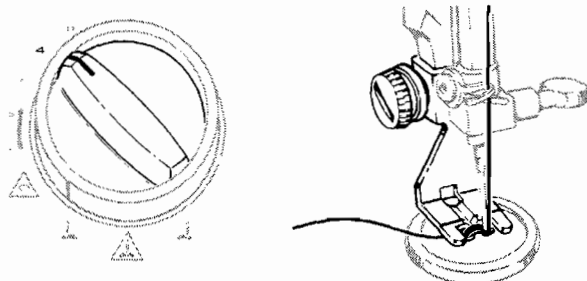
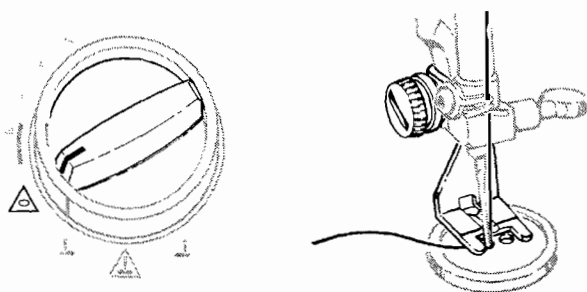
†Sew this stitch with a paper backing.

						
Stitch Pattern						
Stitch Width <sup>††</sup>	0	2.5	2.5	2.5	2.5	2.5
Needle Position						
Stitch Length	12	FINE	FINE	6 (yellow)	10 - 20	6 (yellow)
Presser Foot	Zig-Zag	Special Purpose	Special Purpose	Special Purpose	Special Purpose	Special Purpose
Plate	Zig-Zag	Zig-Zag	Zig-Zag	Zig-Zag	Zig-Zag	Zig-Zag
Speed Setting	MIN	MIN	MIN	MIN	MIN	MIN

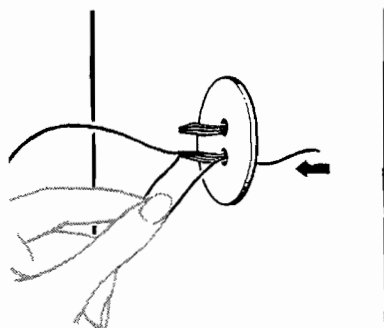
††CAUTION: Do not use a stitch width greater than 2.5 when sewing with twin-needle.  
A wider stitch will result in needle breakage.

## 6. BUTTONS AND BUTTONHOLES

### *buttons*



**Attaching a Button**





Pull Needle Threads  
to Back of Button



Thread Shank  
Completed

**Forming Thread Shank**

- Stitch: Plain Zig-Zag 
- Stitch Width: 0 and 4
- Needle Position: 
- Feed Cover Plate (See page 4 for attaching)
- Button Foot

The space between the holes in the button determines stitch-width settings. The 0 setting must always be used to position the button and to fasten stitching. For buttons with standard hole spacing, settings 0 and 4 are usually satisfactory. For buttons with unusual hole spacing, use setting 0 and increase or decrease the width setting (4) as necessary.

1. Position button under button foot and lower the needle into center of left hole. Lower the foot. Turn hand wheel toward you until the needle rises out of the button and is just above the foot.
2. Set stitch width at 4. Turn hand wheel toward you until needle is just above the right hole. Increase or decrease stitch width, if required, so that needle will enter the right hole of button. Take six or more zig-zag stitches at this setting, ending on left side.
3. To fasten stitching, return to stitch-width setting 0 and take about three stitches.

### **FORMING A THREAD SHANK**

Buttons sewn on coats and jackets should have a thread shank to make them stand away from the fabric. To form a thread shank, sew over the blade of a regular machine needle.

- Position button and lower button foot. Place needle in groove of foot so that point enters the hole in the foot. The farther in you push the needle, the longer the shank will be.
- After stitching, remove needle from groove. Remove work from under presser foot, cutting threads about six inches from fabric. Pull needle-thread ends to back of button and form a firm shank between button and fabric by winding threads tightly around attaching stitches. Tie thread ends securely.

# buttonholes

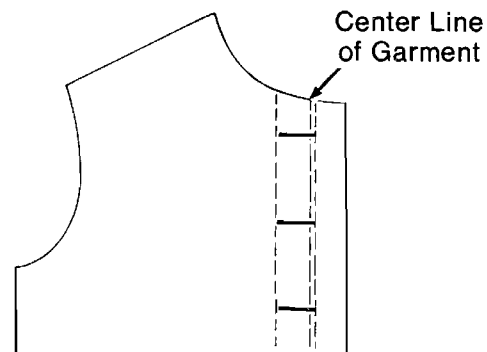
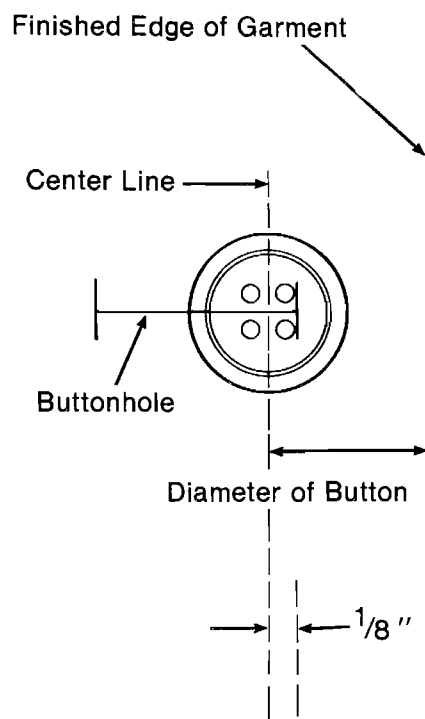
Most fabrics are suitable for machine-stitched buttonholes. If the suitability of the fabric is in doubt, make a test buttonhole in a sample of your fabric, being sure to duplicate the thicknesses of your garment, and include an interfacing.

The built-in buttonhole system of your machine allows you to stitch a complete buttonhole up to 1½ inches in a single step. To make sure the measurement is correct, and for buttons of irregular shape, cut a slit in a scrap of your fabric approximately the width of the button you intend to use, and increase length of opening until button slips through easily.

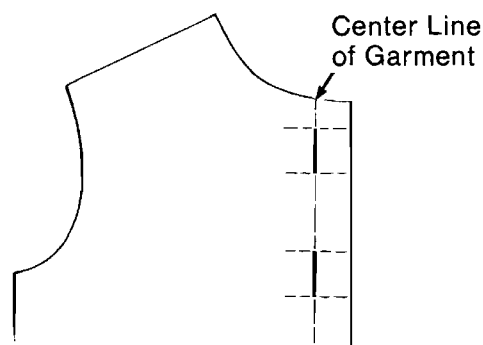
## BUTTONHOLE POSITION

Accurate guidelines are essential to keep buttonholes at a uniform distance from the edge of the garment, evenly spaced, and on the grain of the material.

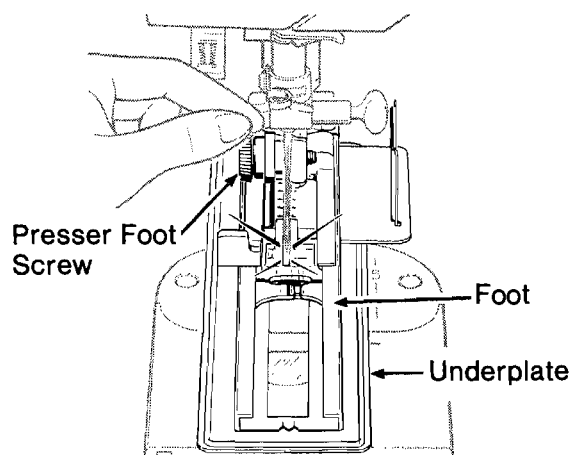
1. Mark center line of garment as indicated on your pattern. This guideline can be made by hand basting and should follow a lengthwise fabric thread.
  2. Mark a guideline for each buttonhole. Fabrics may be marked lightly with tailor's chalk.
- **Horizontal** buttonholes are placed to extend ⅛ inch, beyond the center line of the garment, as shown, so that the buttons will be in the center of the figure when the garment is fastened.
  - Horizontal buttonhole guidelines should follow a crosswise fabric thread and be longer than the finished length of the buttonhole. Mark ends of each buttonhole vertically.
  - **Vertical** buttonholes are placed so that the center line of the garment is in the center of the buttonhole, as shown.
  - Mark the ends of each buttonhole horizontally across the center line basting and use the center line marking as the buttonhole guide when stitching.



Horizontal Placement on Crosswise Grain

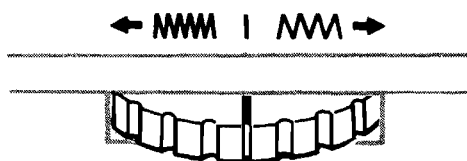
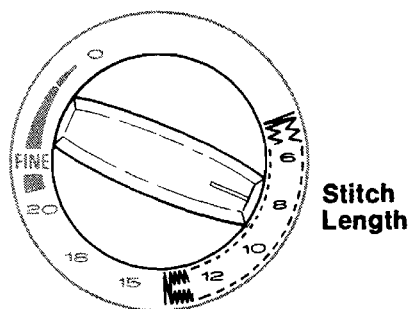
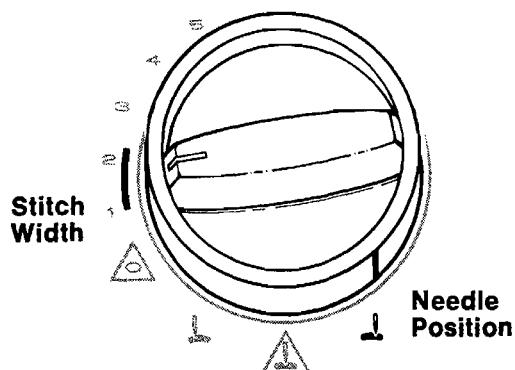
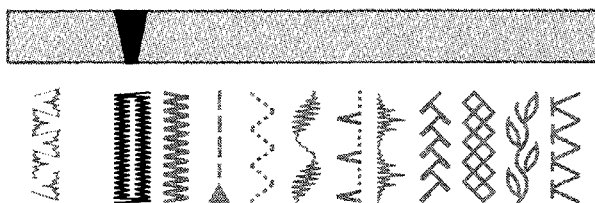


Vertical Placement on Lengthwise Grain



**Attaching Buttonhole Foot**

**Stitch Pattern**



## ONE-STEP BUTTONHOLES

The One-step Buttonhole Foot allows you to stitch complete buttonholes for buttons up to 1-1/2 inches in a single step.

**NOTE:** See page 28 in reference to stitching complete buttonholes and stitch balance.



### Red symbols indicate buttonhole settings

- Stitch: Buttonhole
- Stitch Width: Red (approximately 1 to 2)
- Needle Position:
- Stitch Length: Within 12 10 8 6
- Stitch Balance: Neutral
- Speed: **MIN**
- Zig-Zag Plate
- One-step Buttonhole Foot

### Preparation

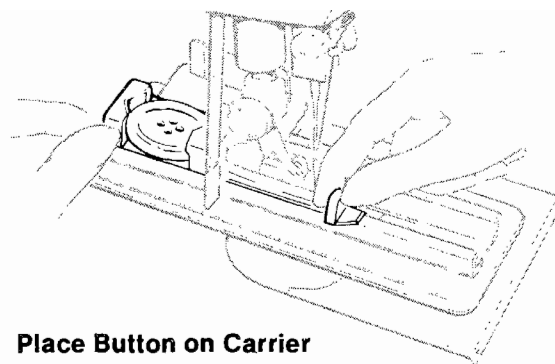
1. Fill bobbin with enough thread to complete buttonholes. The bobbin cannot be conveniently filled after the buttonhole foot is attached.
2. Attach the zig-zag plate and one-step buttonhole foot. Then pull down buttonhole lever.
  - To attach one-step buttonhole foot, place buttonhole foot behind the needle, then guide it forward. Center the foot under the shank and lower the presser foot lifter so that the shank fits over the presser foot pin. Press presser foot screw down firmly until foot snaps into place.
3. Set all dials on red symbols as illustrated. Set the stitch-length dial midway between **6** and **12** in the buttonhole area. Use this setting for your test buttonhole and then increase it or decrease it as necessary. See page 28.
4. Set stitch-balance dial in neutral position. Adjust if necessary to balance stitch density on right and left sides of the buttonhole. See page 28.

## Procedure

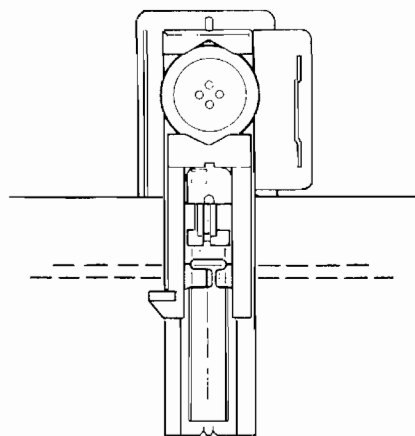
- Place the button you intend to use on the button carrier of the one-step buttonhole foot and slide clamp toward back to secure button. For use without a button, set the clamp with the gauge lines on the carrier. See page 29.
- Draw needle and bobbin threads under foot to back of machine.
- Place garment between foot and underplate. Align buttonhole guideline markings with the red guidelines on the foot. Lower foot.
- Press buttonhole lever *toward you*.
- Start machine and let it stitch the entire buttonhole. Maintain an even sewing speed (and use the same rate of speed for each buttonhole you sew).
- Stop machine when stitching starts to overlap the starting bar tack. Move stitch-width dial to  setting and take one or two fastening stitches.
- Remove work from machine, clip thread ends, and cut button opening. For additional information on the cutting of button openings, refer to page 30. If necessary, reset stitch-width dial on red  for next buttonhole.

When buttonholes are completed, push buttonhole lever up into machine and reset dials for regular sewing. *To remove buttonhole foot press down on the button carrier on both sides of the presser foot shank.*

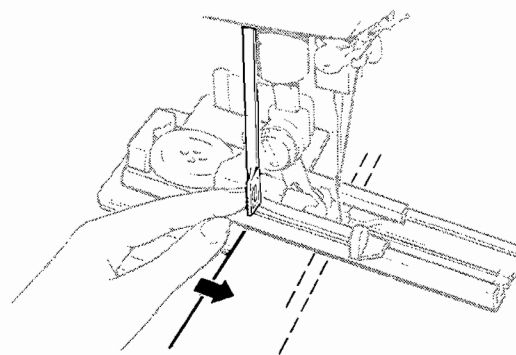
*Turn to page 28 for information about adjusting test buttonhole.*



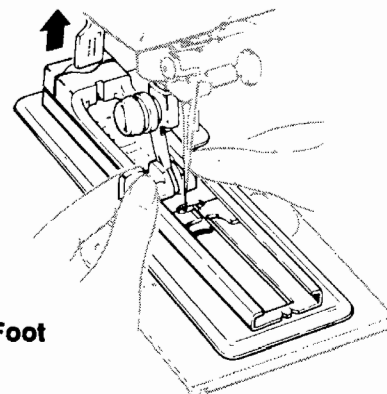
**Place Button on Carrier**



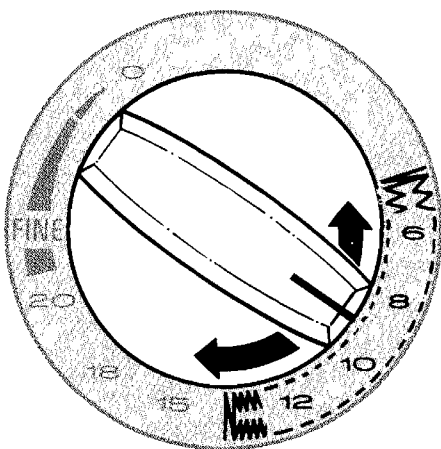
**Aligning Guidelines**



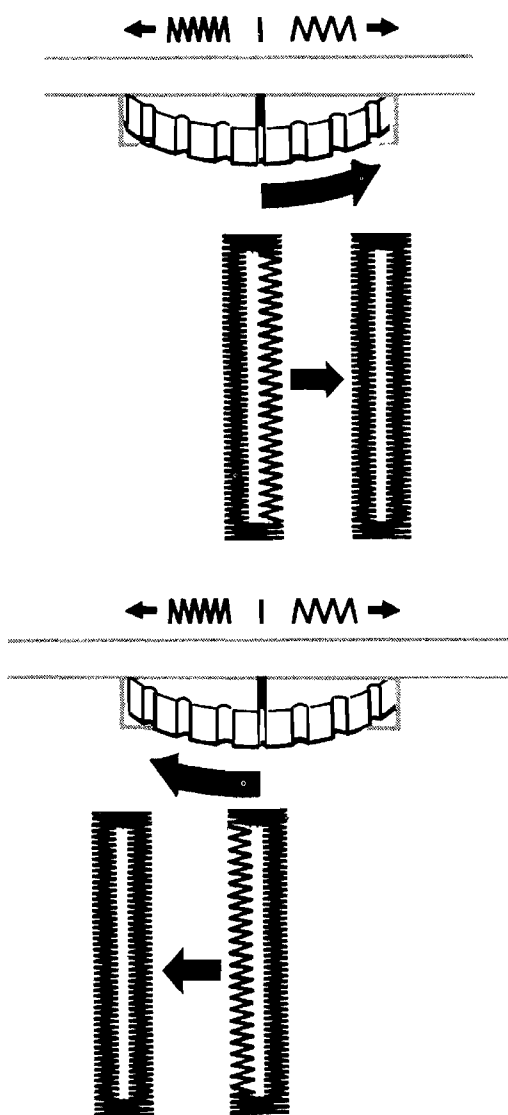
**Engaging Buttonhole Lever**



**Removing Foot**



Adjusting Stitch Length



Adjusting Stitch Balance

## Stitching Complete Buttonholes

Whenever you make a buttonhole, be sure to stitch it *all the way around* (to complete stitching cycle) before re-setting the buttonhole lever for a new start.

If you make a false start when sewing a buttonhole in your garment, simply remove the work and complete the buttonhole stitching on scrap fabric.

## BUTTONHOLE ADJUSTMENTS

### Adjusting Stitch Length

Buttonhole stitch length is regulated by the stitch-length dial. Set it to suit your fabric within the red bracketed area. Generally, short stitches are best for lightweight, woven fabric; longer ones for heavier fabric and knits. Set dial in center of buttonhole symbol for your test buttonhole.

- For shorter stitches, turn the dial toward setting 15.
- For longer stitches, turn the dial toward setting 6.

### Adjusting Stitch Balance

Stitch density on right and left sides of the buttonhole is balanced with the stitch-balance dial. A slight movement of the dial produces a noticeable change in density.

- If the stitches on the **LEFT** side of the buttonhole are too dense, turn the balance dial to the *right* (↘ symbol) to give equal density to both sides of the buttonhole.

*Turning dial to right opens left side and closes right side.*

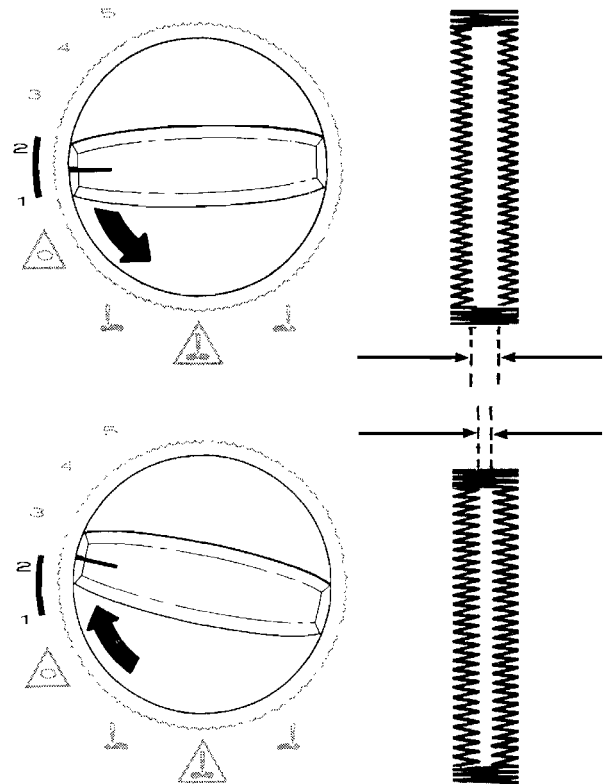
- If the stitches on the **LEFT** side of the buttonhole are too open, turn the balance dial to the *left* (↙ symbol) to give equal density to both sides of the buttonhole.

*Turning dial to left closes left side and opens right side.*

## Adjusting Width of Button Opening

The width of the button opening is regulated by the stitch-width dial.

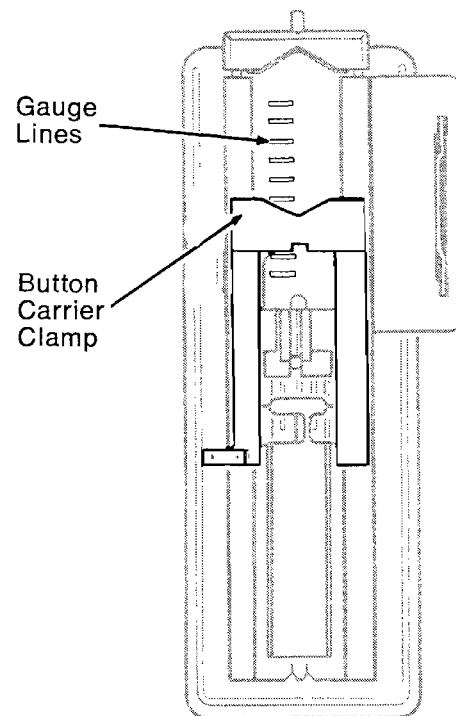
- To make button opening wider, turn dial very slightly toward the **1** setting.
- To make button opening narrower, turn dial very slightly toward the **2** setting.



Adjusting Width of Button Opening

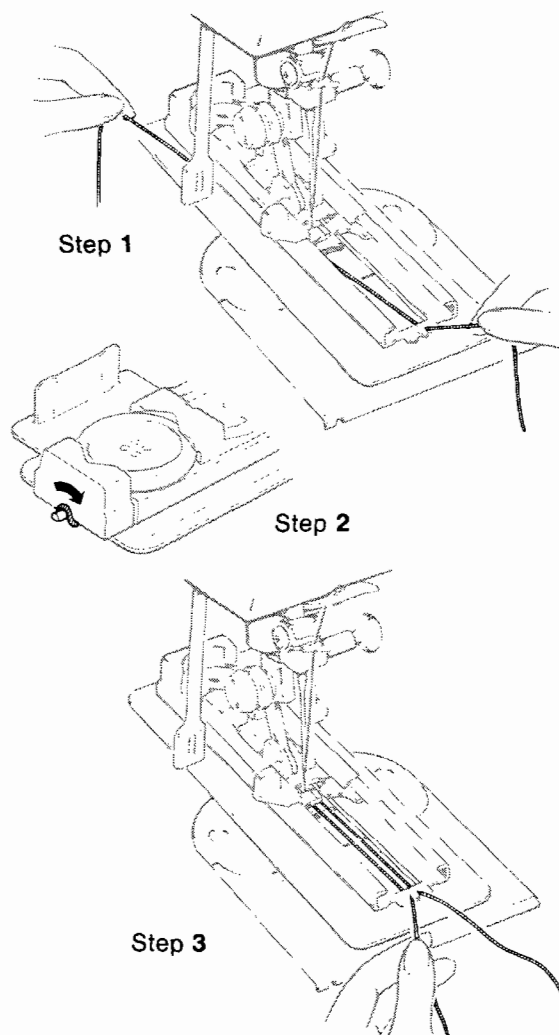
## Adjusting Length of Button Opening

The length of the button opening in one-step buttonholes is controlled by the button-carrier clamp. If the button will not pass through the button opening of your test buttonhole, remove the button from the carrier and slide clamp forward to a new setting. Use the gauge lines ( $\frac{1}{8}$  inch apart) on the carrier to set length and stitch buttonhole without a button in the carrier.

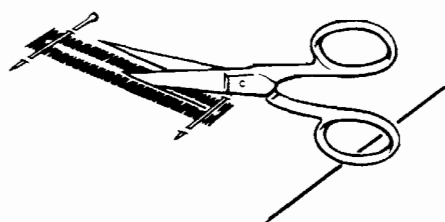
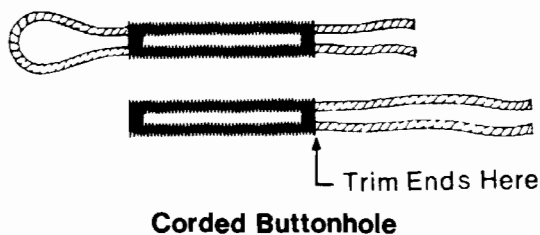


Adjusting Length of Button Opening  
When Using One-step Foot





#### Inserting Cord in One-step Buttonhole Foot



**Cutting Button Opening**

## CORDED BUTTONHOLES

Corded or raised buttonholes are made by stitching over a filler cord. Embroidery or crochet threads make good filler cords, but double strands of sewing thread or a sew-off chain of needle and bobbin thread may also be used.

### Inserting Cord in One-step Buttonhole Foot

- Raise foot. Hold filler cord in both hands, and insert it between foot and underplate, from left side (the side opposite underplate tab). Insert one end of the filler cord in the right notch in front of foot. Lead cord back under foot and loop it up and over the cord spur from right to left.
- Bring cord forward, between foot and underplate, and secure end in left notch.

### Procedure

- Insert cord in buttonhole foot as shown and sew buttonhole in the usual way (see page 27 for one-step buttonholes).
- When stitching is completed, release cord from foot and remove work by drawing it to the back of the machine.
- Draw the loop of filler cord into the buttonhole stitching by holding fabric at the starting end of the buttonhole with one hand and pulling ends of filler cord firmly with the other.
- Trim ends of filler cord. Cut button opening.

## CUTTING BUTTON OPENING


Before cutting button opening, place a pin across the cutting space at each end of the buttonhole to protect the bar tacks. Using a pair of small scissors, insert blade in center of cutting space and cut from this point in both directions. **Slip button through opening of test buttonhole to check length.** For information on adjusting buttonhole length, refer to page 29.

# 7. SEWING THE PROFESSIONAL WAY

## *construction details*

### **ZIPPERS**

At the notions counter in your Singer Sewing Center, you will find many different kinds of zippers, one of which will be just right for whatever you wish to sew. How the zipper is inserted will depend on the type of garment and the location of the zipper. The zipper package will contain easy-to-follow instructions. And, if you use the zipper foot, you will find it easy to form an even line of stitching close to the zipper.

- 
- Stitch: Straight !
  - Stitch Width: 
  - Needle Position: 
  - Stitch Length: 10 to 15
  - Straight-Stitch Plate
  - Zipper Foot
- 

### **ADJUSTING THE ZIPPER FOOT**

When the zipper is to the right of the needle:

- Attach right side of zipper foot to shank (needle will enter right notch in foot).

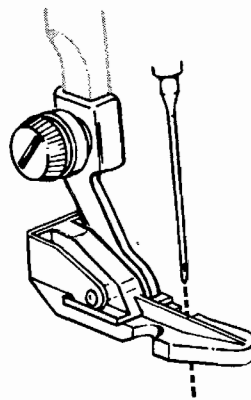
When the zipper is to the left of the needle:

- Attach left side of zipper foot to shank (needle will enter left notch in foot).

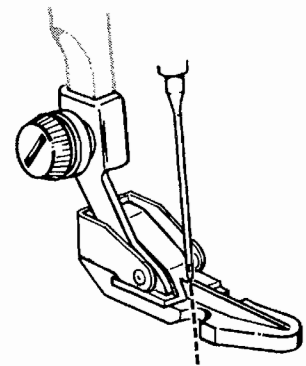
### **CORDED SEAMS**

The corded seam is a professional treatment for slipcovers, children's clothes, blouses, and lingerie. To make a corded seam, make the welting first (or buy it ready-made at a notions counter), then stitch it into the seam. For both steps, use the zipper foot to place the stitching close to the cord.

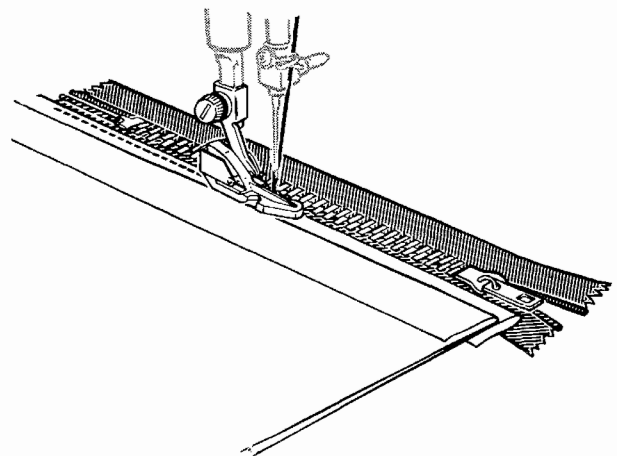
**CAUTION:** Use the pattern selector to select straight stitch before attaching zipper foot to the machine. This eliminates the possibility of needle breakage.



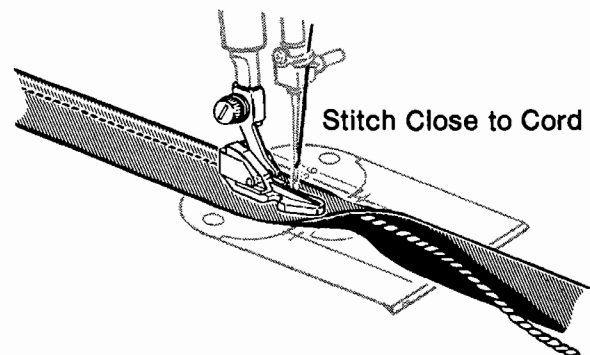
**Zipper Foot to  
Right of Needle**



**Zipper Foot to  
Left of Needle**





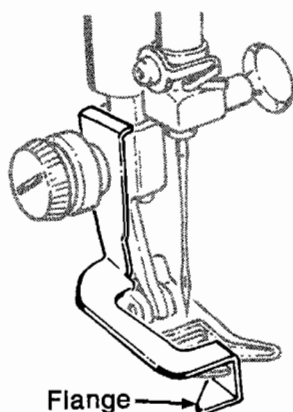
**Zipper Insertion**



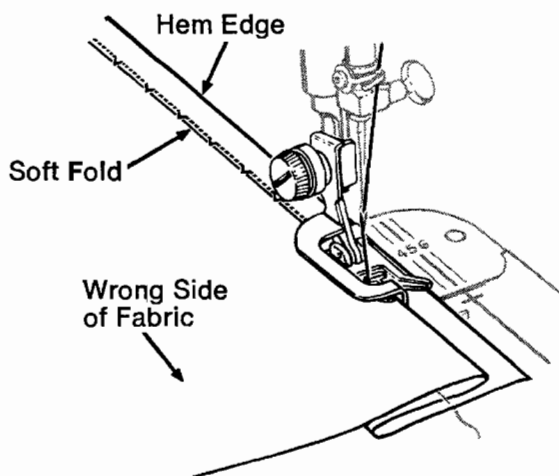
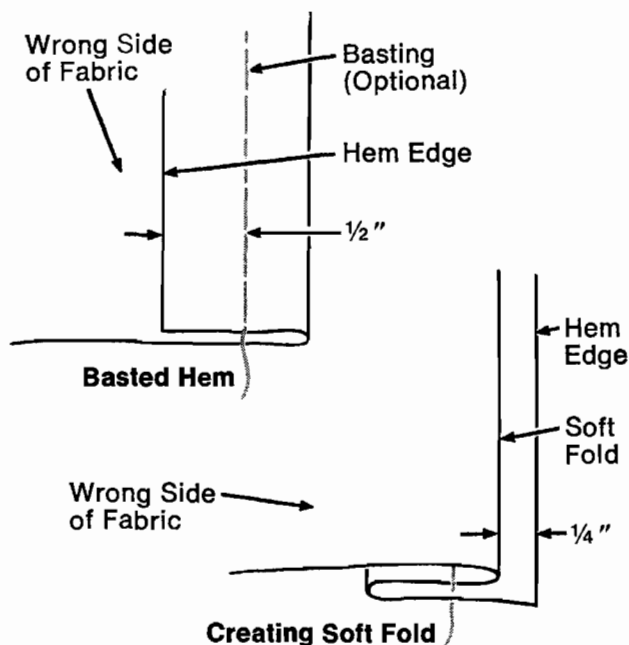
**Making the Welting**

## BLINDSTITCH HEMS

- Stitch: Blindstitch
- Stitch Width: **2 to 5** (depending on fabric)
- Needle Position:  or 
- Stitch Length: **6 to 12**
- Zig-Zag Plate
- Zig-Zag Foot
- Blindstitch Hem Guide



**Blindstitch Hem Guide**



**Blindstitching a Hem**

Blindstitching takes a little practice, so make a test sample first.

*Raise take-up lever to its highest position.*

1. Raise presser foot, loosen presser-foot screw, and slip blindstitch hem guide between screw and shank of zig-zag foot. Make sure underside of guide clears slide plate and front of foot. Tighten presser-foot screw.
2. Turn up hem in width desired. Apply appropriate finish to hem edge and press. (You may want to baste the turned hem to hold it in place. If so, be sure to place basting at least  $\frac{1}{2}$  inch *below* top edge of hem.)
3. Fold the hem back against right side of garment, creating a soft fold about  $\frac{1}{4}$  inch from top edge of hem on wrong side of work. Press lightly.
4. Position hem under foot with soft fold resting against wall of guide. Make sure flange of guide is between the soft fold and top of hem.
5. Lower the foot and stitch so that the straight stitches fall on the hem edge and sideward stitches pierce the soft fold. While stitching, guide hem edge in a straight line and feed soft fold evenly against wall of hem guide.
6. Raise take-up lever to its highest position. Raise presser foot and remove work (by drawing it to the back).

## DARTS

Darts can be made in the usual way on your sewing machine. That is, you begin stitching at the wide end of the dart, stitch to the point, and then fasten the two thread ends.

However, thanks to the push-button bobbin, you can avoid the problem of fastening the thread ends by making a “continuous-thread” dart and stitching in the opposite direction. This method is particularly useful for darts in sheer fabrics, where transparency requires a neat, clean finish. It is also useful for darts made on the right side of a garment as a style detail.

### Regular Darts

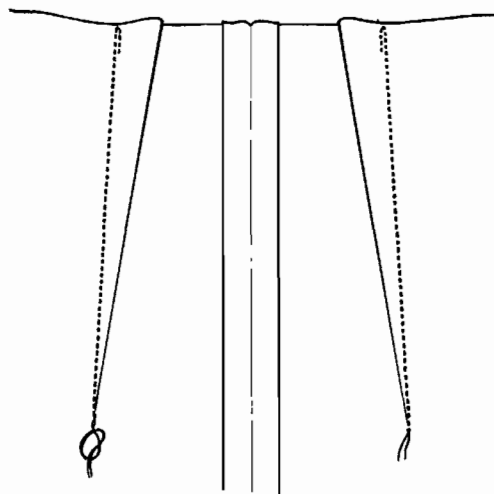
- Stitch: Straight !
- Stitch Width: 
- Needle Position: 
- Stitch Length: About 12 or to suit fabric
- Straight-stitch Plate
- Straight-stitch Foot

1. Stitch from the seam edge, tapering gradually to the point.
2. Stitch beyond the fabric to form a thread chain  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long.
3. Clip thread ends about 2 inches from dart point and tie the ends into a single knot close to the stitching.

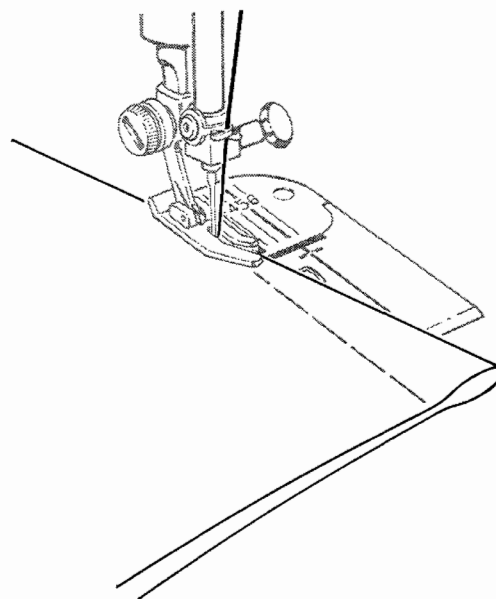
### Continuous-thread Darts

1. Set the machine as for regular darts.
2. Wind an empty bobbin with a small amount of thread to make a single dart. (To hasten separation of starting thread end from the winding bobbin, pull thread end gently after winding has started.)
3. Close slide plate, and position the needle in the very edge of the fold, at the point of basted or pinned dart. Lower presser foot.
4. Stitch carefully from the point to the wide end of the dart at the seam edge.

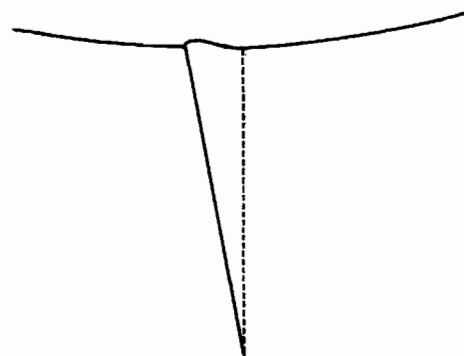
Remove excess thread from bobbin and re-wind for each dart.



Regular Darts



Starting to Stitch Continuous-thread Dart













Continuous-thread Dart

## sewing knit and stretch fabric

When you sew stretch fabrics, double knits, tricot, jersey, and elastic, choose one of the stitch patterns that build stretch into the seam. A wide variety of stitches are available.

See table below. *Remember to use a ball-point **Yellow Band** needle in the machine when you attach elastic or sew knit or stretch fabric.*

### STRETCH STITCH CHART

Pattern	Where to Use
 <b>Straight Stretch Stitch†</b> Built-in Feather (  ) or Honeycomb (  ) (Stitch Width  )	Plain seams that s-t-r-e-t-c-h — Sleeve and gusset insertion — Swimsuit construction — Crotch seams — Repairing and reinforcing seams.
 <b>Overedge Stretch Stitch†</b>	Overedge seams that stretch — Crotch seams — Waistband and seam finishes in shorts and slacks — Ski-suit, snow-suit, and swimsuit construction.
 <b>Honeycomb Stitch†</b>	Attaching elastic and stretch lace — Lingerie and girdle repair — Swimsuit construction — Edge finishes for seams, hems, and facings.
 <b>Multi-Stitch Zig-Zag†</b>	Attaching elastic and stretch lace — Lingerie and swimsuit construction — Girdle seams — Seam finishes — Casings and waistband finishes.
 <b>Plain Zig-Zag</b>	General-purpose stretch sewing — Lingerie seams — Attaching stay tape — Seam finishing — Edge finishing — Attaching stretch lace.
 <b>Blindstitch</b>	Flexible blindstitch hemming — Overcast seam finishing — Shell hems in lingerie.
 <b>Feather Stitch†</b>	Swimsuit seams — Attaching stretch lace — Lingerie and girdle seams.

†This stitch is designed for strength and permanence and cannot readily be ripped out without risk of fabric damage.

## STARTING TO SEW USING A FLEXI-STITCH PATTERN

When using a *Flexi-Stitch* pattern, the forward-reverse stitching direction is controlled by the pattern disc. For this reason, *Flexi-Stitch* patterns cannot be reversed (back-tacked).

To start sewing with a *Flexi-Stitch* pattern, draw needle and bobbin threads under foot to back of machine. Hold thread ends and position needle in fabric with a light touch on the speed controller. Lower presser foot and hold thread ends at back of foot as you start to stitch. This will prevent the threads being drawn down into the needle hole. The *Flexi-Stitch* pattern itself will reinforce the ends of your seam.

## GUIDING AND SUPPORTING FABRIC

Most stretch and knit fabrics need only to be guided in front of the presser foot when you use one of the stretch stitches. Simply let the machine move the fabric to make stitches that give *s-t-r-e-t-c-h* to seams.

Some fabrics, however, require support while being stitched.

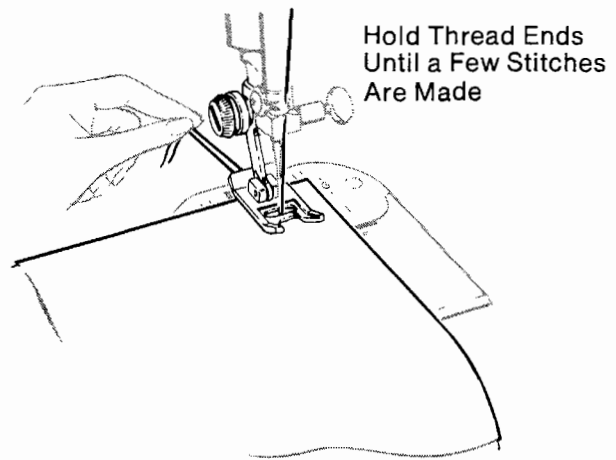
- For nylon tricot and similar synthetic knits, apply *gentle* tension by holding seam in front and back of the presser foot.

**CAUTION:** Do not pull the fabric while you are stitching as this may deflect the needle, causing it to break.

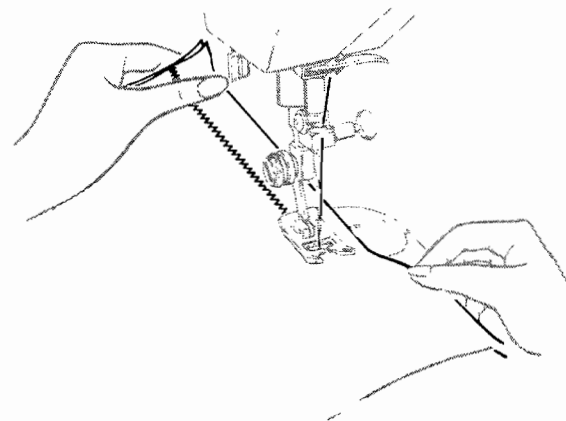
## ADJUSTING PRESSURE WHEN SEWING KNIT AND STRETCH FABRIC

Some knit and stretch fabrics, because of their structure, require either more or less than normal (**NORM**) presser-bar pressure to feed smoothly and evenly.

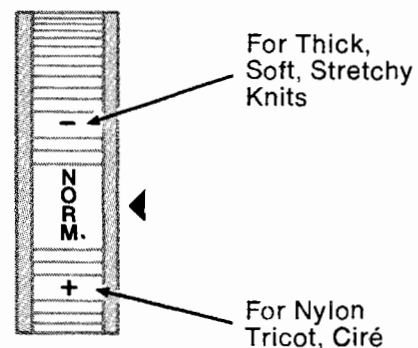
- For thick, soft or very stretchy knits, decrease pressure by turning dial from **NORM** (normal) toward **DARN**.
- For nylon tricot, ciré and similar hard surface synthetic knits, increase pressure by turning dial from **NORM** (normal) toward **MAX** (maximum).



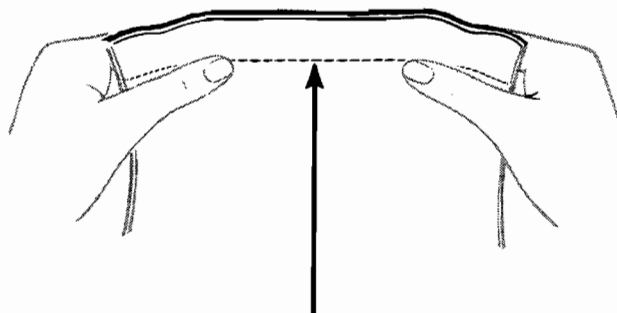
Starting to Sew Using a Flexi-Stitch Pattern



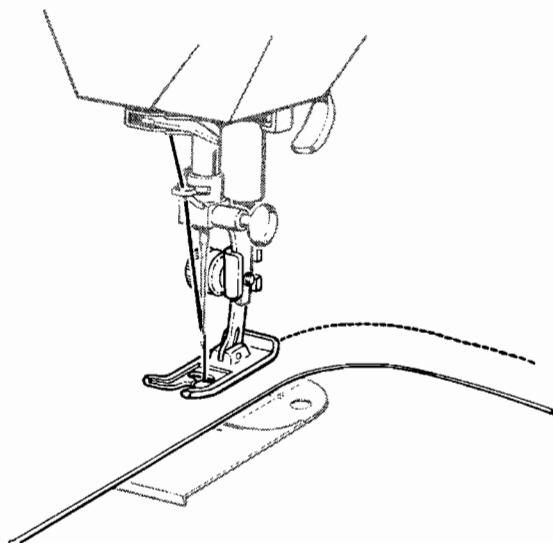
Applying Gentle Tension to Tricot



Pressure Settings for  
Sewing Knits







**Straight Stretch Stitching**



**Straight Stretch Stitching  
with Zig-Zag Foot**

## STRAIGHT STRETCH STITCH SEAM

When you use the straight stretch stitch (produced with either Feather (  ) or Honeycomb (  ) pattern at  stitch width) to seam knit, stretch, and elasticized fabric, s-t-r-e-t-c-h and strength are built in as the seam is being sewn. Because it is equally useful for closed or pressed-open seam construction and will not break thread under stress, the straight stretch stitch is also good for seams that receive an unusual amount of strain. For example: crotch seaming, seam insertion, and construction seams in sportswear and swimsuits.

- 
- Stitch: Feather  or Honeycomb 
  - Stitch Width: 
  - Needle Position: 
  - Stitch Length: **6 to 8** (in yellow area)
  - Stitch Balance: Equalized
  - Speed: **MIN**
  - Zig-Zag Plate
  - Zig-Zag Foot
- 

### Preparation

Make a test sample to determine thread tension and adjust stitch balance. (See page 21.) Be sure to insert a ball-point *Yellow Band* needle in machine if you are stitching a knit stretch or elastic fabric.

### Procedure

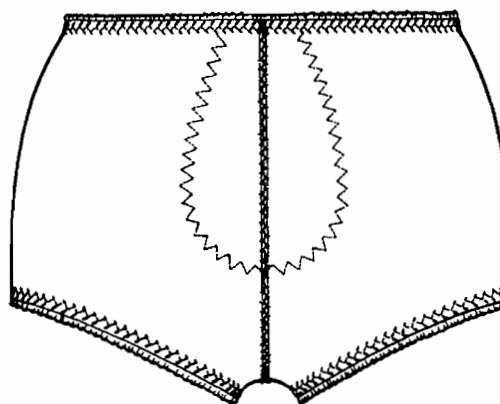
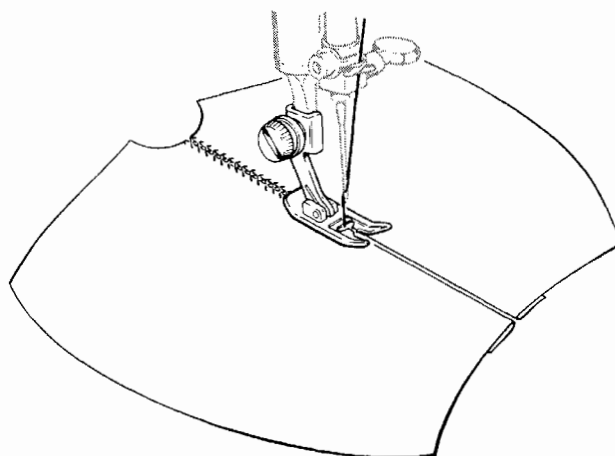
1. Draw needle and bobbin threads under foot to back of machine. Hold thread ends and position needle in fabric with a light touch on the speed controller.
2. Lower the presser foot and start machine, holding the thread ends as the first few stitches are made.
3. Guide fabric lightly as you sew, letting the machine make the back-and-forth stitches that give s-t-r-e-t-c-h to the seam.
4. Press seam after stitching as when using the regular straight stitch.

## FAGOTING

- Stitch: Featherstitch 
- Stitch Width: 5
- Needle Position: 
- Stitch Length: 6 to 8 (in yellow area)
- Speed: **MIN**
- Zig-Zag Plate
- Zig-Zag Foot

The art of joining two pieces of fabric with an open, lacy decorative stitch is called fagoting. You can create this attractive trimming with the featherstitch. Use it for decorative stretch seams in bathing suits or for joining together narrow strips of fabric to make an entire garment section.

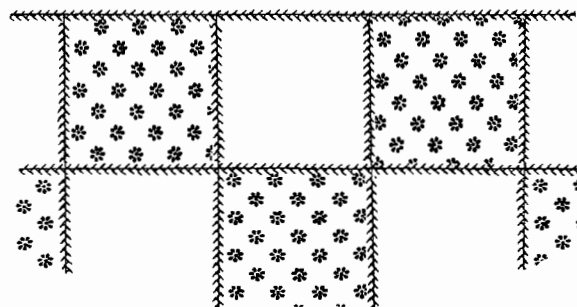
- Turn under (and hem by hand slipstitching) the raw edges of the fabric strips or seams to be joined. Press flat or you may zig-zag raw edges.
- Baste two fabric edges to be joined onto tissue paper leaving approximately 1/8-inch (3mm) gap between the two edges. Stitch, guiding two fabric edges under the center of presser foot. Allow the needle to alternately make a stitch in each fabric strip and two stitches in the center of the opening. The tissue paper should be gently pulled away when fagoting is completed.



**Fagoting a Seam**

## Patchwork Quilting

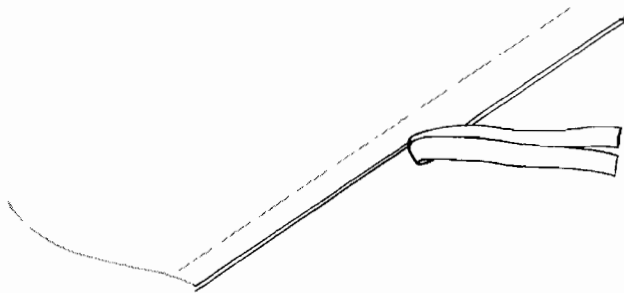
- Cut a fabric underlay to size. Baste a light layer of padding to underlay if a quilted effect is desired.
- Prepare patches, turning under 1/4-inch (6mm) seam allowance. On non-woven fabric this step is not necessary.
- Baste patches to underlay in arrangement desired, butting all edges.
- Stitch in lengthwise and crosswise rows, allowing stitches to straddle patches.



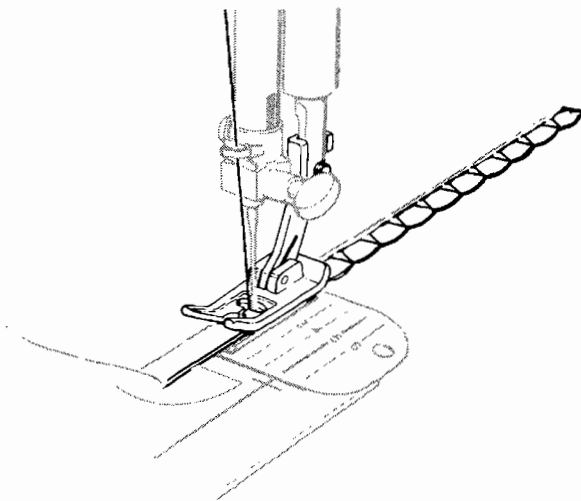
**Patchwork Quilting**



### Overedged Seam





Trimming Seam Edges



Stitching Seam

## OVEREDGED SEAMS

- Stitch: Overedge Stretch 
- Stitch Width: 5
- Needle Position: 
- Stitch Length: 6 to 8
- Stitch Balance: Equalized
- Speed: **MIN**
- Zig-Zag Plate
- Zig-Zag Foot

Seams in knit and stretch fabrics can be joined and finished in one operation when you use the overedge stretch stitch.

### Procedure

1. Make a test sample before beginning garment construction to test machine settings. (See page 21 for adjusting stitch balance.) Be sure to duplicate the cut of the garment seam in your test, and use a ball-point *Yellow Band* needle if you are sewing a synthetic knit fabric.
  - Baste the garment together on the seam line allowing for 5/8-inch seam allowance and fit in usual way.
  - After making any necessary adjustments, trim seam edge evenly to a scant 1/4-inch from seam line basting.
  - Place trimmed seam under the foot so that the straight stitches fall on the basted seam line and zig-zag stitches fall over the seam edge.

## MOCK OVEREDGING

- Stitch: Overedge Stretch Stitch 
- Stitch Width: 5
- Needle Position: 
- Stitch Length: (in yellow area)
- Stitch Balance: Equalized
- Speed: **MIN**
- Zig-Zag Plate
- Zig-Zag Foot

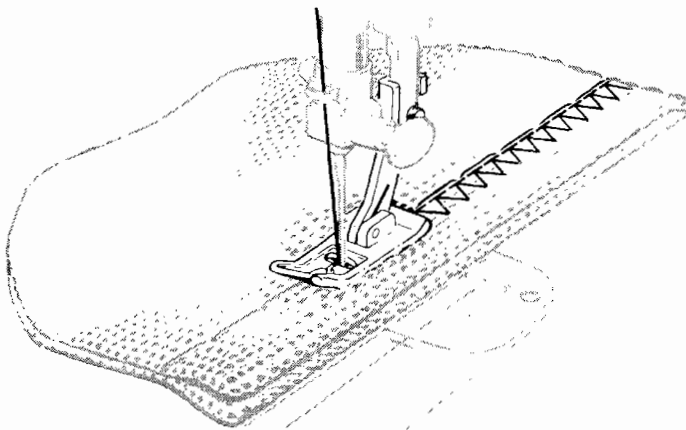
When it is not practical to overedge a seam because of fabric construction, a mock over-edge finish can be applied. This finish is appropriate for bulky knits, stretchy sweater knits, fine tricots, and fabrics that curl or fray.

### Procedure:

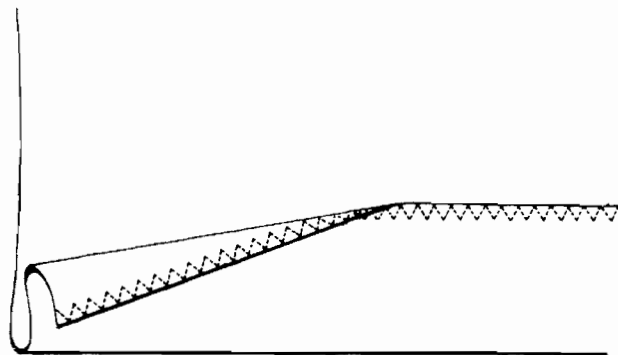
- Make a test sample to check machine adjustments, including pressure setting, before beginning garment construction.
- Baste the garment together on the seam line and fit in the usual way.
- After making any necessary adjustments, place seam under the presser foot. Stitch so that the stitches on the left side of the pattern penetrate the basted seam line.
- Press after stitching and trim away excess fabric to produce a narrow seam edge. When the seam supports the garment, omit the trimming step.

## FINISHES FOR HEMS AND FACINGS

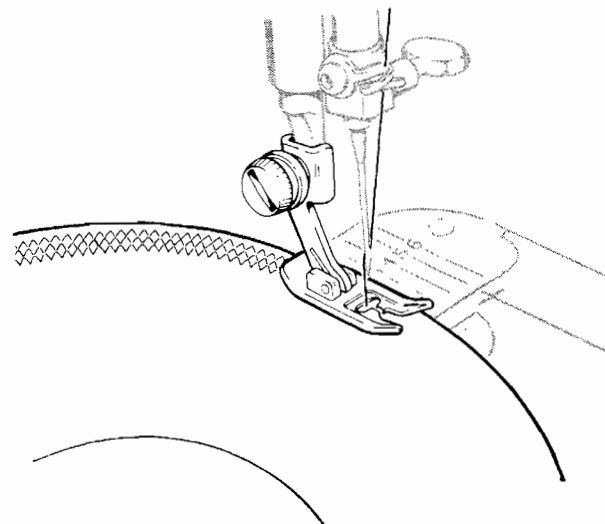
Hems and facing edges in knit and stretch fabrics will be less apt to press through and mark when given a flat edge finish. Edge finishing with the multi-stitch zig-zag stitch and honeycomb stitch, eliminates the bulk of turned-in fabric edges and retains fabric flexibility. Make a test sample to determine the best stitch for your fabric. Place stitching about 1/8-inch from hem or facing edge. Press after stitching and trim away excess fabric close to the stitching line.



Mock Overedging



Finished Hem Edge










Applying Facing Finish

## handling special fabrics

Many fabrics, because of their construction or finish, demand special attention in sewing. Techniques used in stitching and handling, and choice of machine accessories, will vary








with the fabric. Let the table below guide your selection. Refer to page 34, for instructions on sewing knit and stretch fabrics. Thread usage information is tabulated on page 7.

**FABRIC-HANDLING TABLE**

FABRIC	SPECIAL HANDLING	STITCH Length-Type	NEEDLE Style-Size	MACHINE ACCESSORIES
VINYL — leather-look patent, suede, reptile	Use transparent tape as a substitute for pins or basting — Topstitch to hold seams and edges flat — Avoid worked (machine) buttonholes.	6-8  Straight Stitch	Style 2020 Size 14 or 16 for woven backing  Style 2045 Size 14 or 16 for knit backing	Zig-Zag Foot or <i>Even Feed</i> Foot† Zig-Zag Plate
PILE — velvet, velveteen, corduroy	Stitch in direction of nap — Use plain seams — Overcast or bind seam edges to prevent fraying — Press over a self-fabric cloth.	10-15  Straight Stitch for seams  12-15  Zig-Zag or Honeycomb Stitch  for over- casting	Style 2020 Size 14  Style 2045 Size 14 or 16 for panne velvet	(Zig-Zag Foot for overcasting) or <i>Even Feed</i> Foot† Zig-Zag Plate
DEEP PILE — fake fur	Pin rather than baste seams — Stitch in direction of nap — Use plain seams for short-hair furs; narrow overedged seams for shaggy, bulky furs — Shear pile from seam allowances to reduce bulk.	6-10  Straight Stitch for plain seams  12-20  Zig-Zag Stitch	Style 2020 Size 16	Zig-Zag Foot or <i>Even Feed</i> Foot† Zig-Zag Plate
PERMANENT PRESS — percale, broadcloth, shirting	Control seam tension manually by holding fabric taut as it passes under the presser foot. Sew at moderate speed.	10-15  Straight Stitch	Style 2020 Size 11 or 14	Straight- Stitch Foot  Straight- Stitch Plate

†The *Even Feed* Foot described on page 55 is designed to aid in sewing this fabric.

## FABRIC-HANDLING TABLE

FABRIC	SPECIAL HANDLING	STITCH Length-Type	NEEDLE Style-Size	MACHINE ACCESSORIES
FINE KNITS — tricot, jersey	Use narrow overedged, double stitched, or French whipped seams — Hold thread ends securely for a few stitches at start of seam — Support seams while stitching. See page 35. — Increase presser-foot pressure.	8-12  Straight Stitch 12-15  Narrow Zig-Zag	Style 2045 Size 11 or 14 only	Straight- Stitch Foot and Straight- Stitch Plate (for straight stitching) Zig-Zag Foot and Zig-Zag Plate (for zig-zag stitching)
BLANKET BINDING — satin face	Hand-baste binding to blanket (pin marks show) — Miter corners.	6-10  Straight Stitch 6-12  Zig-Zag Stitch or Decorative Stitch	Style 2020 Size 11 or 14	Zig-Zag Foot or <i>Even Feed</i> Foot† Zig-Zag Plate
SOFT SHEER — chiffon, voile, China silk	Use French seams, double stitched, or French whipped seams — Hold ends of needle and bobbin thread when you begin to stitch — Support fabric while stitching. See page 15.	12-15  Straight Stitch	Style 2020 Size 9 or 11	Straight- Stitch Foot Straight- Stitch Plate
BEADED and SEQUINED FABRIC	Remove beads from seam allowance — Baste seam line — Stitch with zipper foot to <b>right</b> of needle.	To suit fabric backing	To suit fabric backing	Zipper Foot Straight- Stitch Plate
BONDED OR LAMINATED FABRIC —	Use welt, flat-felled, or double-topstitched seams — Slash darts, grade seams, and reinforce button and buttonhole areas.	6-8  Straight Stitch	Style 2020 Size 14 for foam backing Style 2045 Size 14 for knit backing	Zig-Zag Foot or <i>Even Feed</i> Foot† Zig-Zag Plate
NAPPED FABRIC — cashmere, mohair, camel hair	Cut with nap running down — Sew in direction of nap — Topstitch to hold seams and edges flat.	6-12  Straight Stitch	Style 2020 Size 11-16	Zig-Zag Foot or <i>Even Feed</i> Foot† Zig-Zag Plate

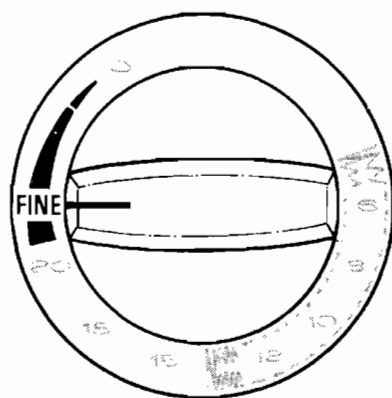
†The *Even Feed* Foot described on page 55 is designed to aid in sewing this fabric.

## decorative touches

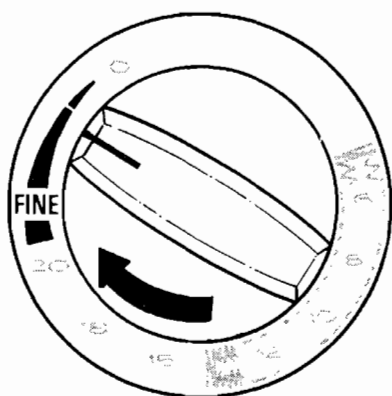
### SATIN STITCHING

Satin stitching, a series of closely spaced zig-zag stitches that form a smooth, satin-like surface, is useful for both practical and decorative work. The plain zig-zag stitch, for example, is suitable for appliqué when closed up to form a satin stitch. Other built-in *Fashion* Stitch patterns (as illustrated on page 18) can be sewn at satin-stitch length.

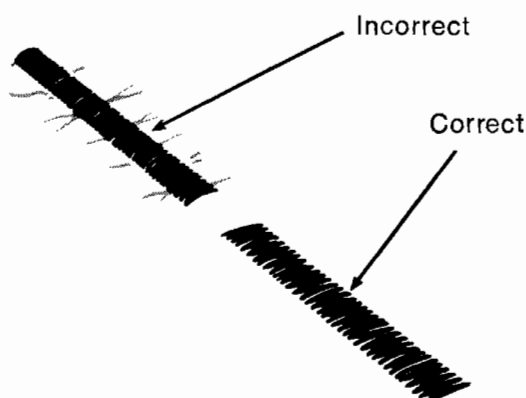
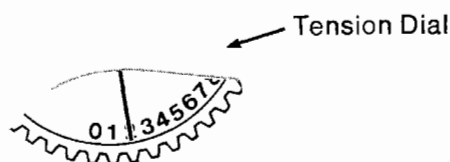
When you wish to produce a satin stitch, make a test sample first so that you can adjust the stitch length and thread tension properly. Soft fabric may require a backing to ensure firm satin stitching. Crisp lawn or organdy is suitable for this purpose. For best results, use the special purpose foot.



Stitch Length in FINE Area



As Dial Is Turned, Stitches Close Up



Adjusting Thread Tension

- Stitch: Desired *Fashion* Stitch
- Stitch Width: 2 through 5
- Needle Position: 
- Stitch Length: **FINE** area
- Zig-Zag Plate
- Special Purpose Foot

### Adjusting Stitch Length

1. Set stitch-length dial at bottom of **FINE** area.
2. Run machine at slow speed.
3. Gradually turn dial clockwise until stitches are closely spaced and form a smooth surface.

### Adjusting Thread Tension

Satin stitching usually requires less tension than straight stitching and open zig-zag stitching. Furthermore, the wider the satin stitch, the lighter the tension on your thread must be. Notice the stitching on your sample. If the fabric is puckered, or the bobbin thread is pulled to the fabric surface, lower the needle-thread tension by turning the dial to a lower number.

## APPLIQUÉ

Appliqué adds beauty and interest to clothing and household linens. You can create your own design, trace a simple outline from a coloring book, or use a motif cut from a printed fabric. Fabrics of like or different texture combine equally well.

A closely spaced zig-zag stitch is most commonly used in appliqué work, but decorative stitch patterns may also be used effectively. Although you may vary stitch width to accommodate fabric weave or texture, never allow the stitch to be too wide.

When appliquéing, make a test sample to help you decide which of the following two methods is more appropriate for your fabric and design.

### Preparation

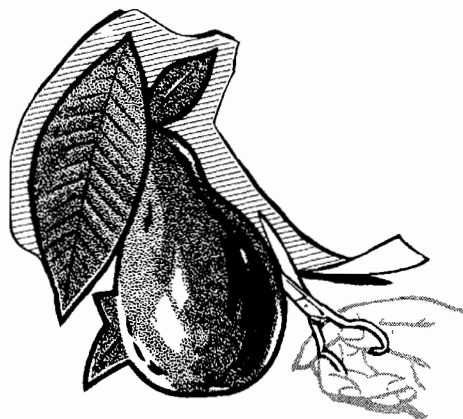
- Baste appliqué to fabric.
- Outline appliqué with straight stitching (use a short stitch).
- Remove basting and press.
- Attach special-purpose foot (and zig-zag plate).

### Method #1 — Trimming after Stitching

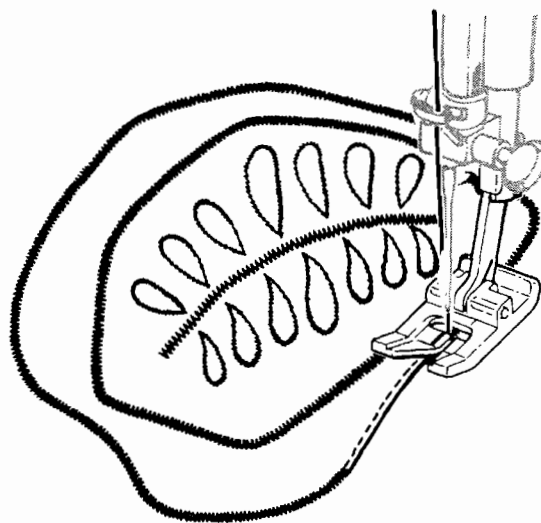
1. Set pattern selector and stitch-width dial for desired appliqué stitch. Adjust stitch length in the **FINE** area.
2. Outline the entire design with appliqué stitching.
3. Cut away the fabric on the outer edges of the stitching with embroidery scissors.

### Method #2 — Stitching after Trimming

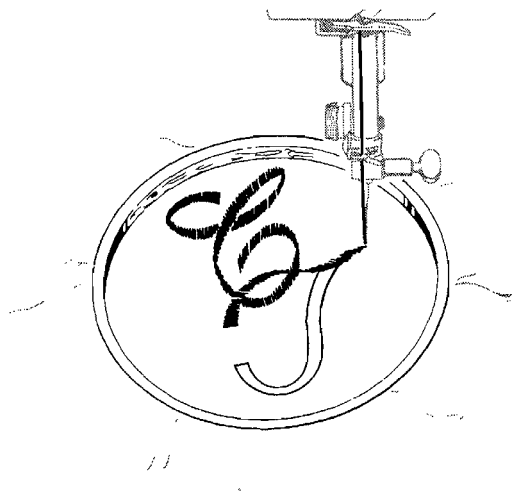
1. Trim outside fabric edges close to straight-stitch outline of design.
2. Set pattern selector and stitch-width dial for desired appliqué stitch. Adjust stitch length in the **FINE** area.
3. Overedge the design with appliqué stitching. This step will produce a smooth, lustrous finish.



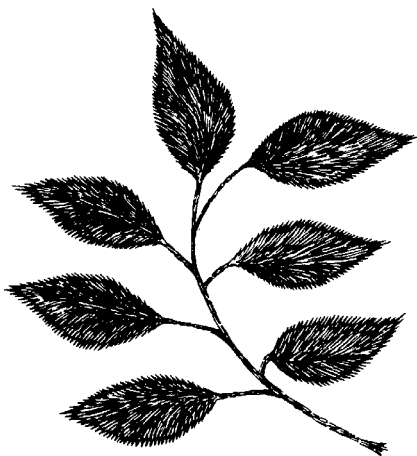
Method #1 — Trimming after Stitching



Method #2 — Stitching after Trimming







**Monogramming with Plain Zig-Zag Pattern**



**Free-Motion Embroidery**

## FREE-MOTION EMBROIDERY

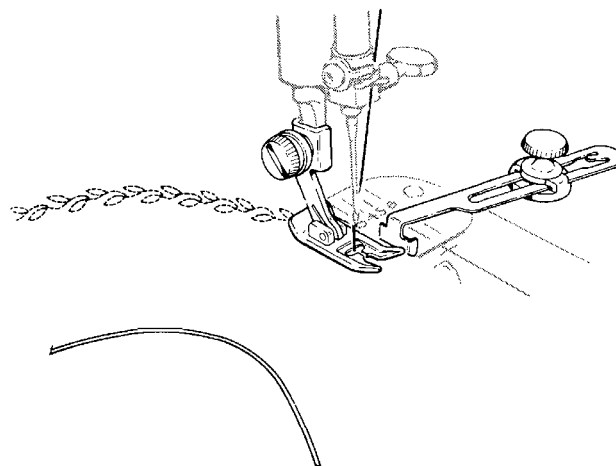
In free-motion embroidery, you control the direction and speed of fabric movement by means of an embroidery hoop. Stitch length is determined by the speed at which the hoop is moved and zig-zag stitch width is varied by the direction of hoop movement. The hoop should be one designed for machine use.

- 
- Stitch: Plain Zig-Zag  (or Straight Stitch  )
  - Stitch Width: 2 through 5 (or  Straight Stitch)
  - Needle Position: 
  - Speed: In **MIN** range
  - Feed Cover Plate (See page 4 for attaching)
  - No Presser Foot or Shank
- 

1. Attach feed cover plate.
2. Trace or transfer design outline to right side of fabric and center in embroidery hoop. Make sure fabric is taut.
3. Raise presser-foot lifter to its high position, place hoop under needle and lower presser bar to engage thread tension.
4. Hold needle thread loosely with left hand, turn hand wheel over, and draw bobbin thread up through fabric.
5. Lower needle into fabric, hold thread ends and start stitching. After two or three stitches, cut thread ends.
6. Run machine at an even rate of speed, following or filling in design outline as appropriate. Move hoop rapidly to increase stitch length and change the direction of hoop movement. To shade change zig-zag stitch width from wide to narrow.

## TOPSTITCHING

A practical, simple way to accent the lines of a dress or coat is to place one or more rows of stitching along collars, lapels, facing edges, hems, pockets, seams, etc. For a tailored look, use lines of regular straight stitching; sew them with buttonhole twist (or double strands of regular thread) for added emphasis. For decorative interest, use a zig-zag stitch. To keep stitching at an even distance from the fabric edge, use the seam guide available for separate purchase at your local Singer Sewing Center.

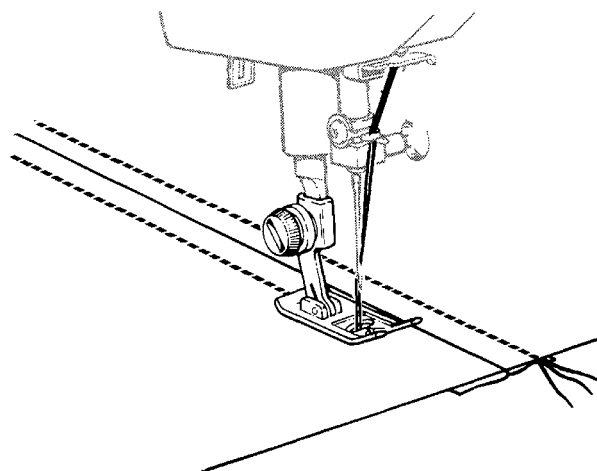
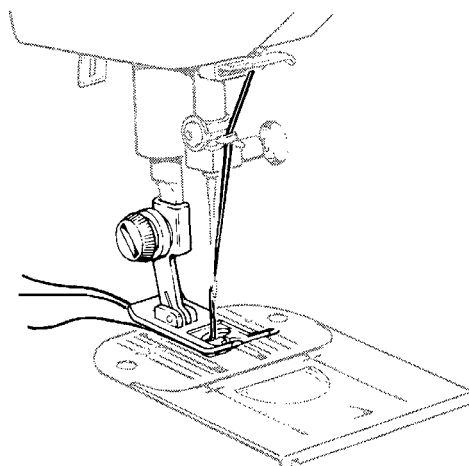


**Topstitching with Leaf Stitch**

## Two-thread Topstitching

Bold, well-defined topstitching is produced by using two strands of regular thread in the needle instead of a single strand. Ideal for summer knits, linens, cottons, denims, and vinyls, two thread topstitching is economical and particularly appropriate for use when a non-lustrous, washable finish is required.

- Select a size 16 Style 2020 needle for woven fabric and use a size 14, Style 2045 *Yellow Band* needle for knits.
- Set the machine for straight stitching.
- Clip detachable spool pin to thread guidepost by pushing open end of detachable spool pin around guidepost.
- Using the two threads, thread the machine in the regular way for single-needle stitching. For best results, use size 50 mercerized cotton thread or cotton-wrapped polyester thread.
- Pass threads together into tension discs and threading points above the needle.
- Cut thread ends diagonally and draw both through the eye of the needle using the needle threader.
- Make a stitching test to determine the best stitch length and needle-thread tension. A long stitch, **6 to 10** per inch, is usually best.
- Sew at moderate speed.



**Two-thread Topstitching**



# keeping up appearances

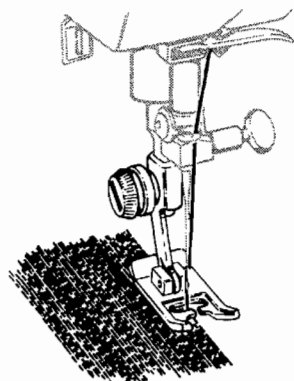
## DARNING

Worn or torn spots on children's clothes, knits, and household linens can be darned effortlessly and quickly with little practice. You may choose to darn either with or without an embroidery hoop. When greater control is needed, use an embroidery hoop designed for machine use.

### Without Embroidery Hoop



- Stitch: Straight †
- Stitch Width: 
- Needle Position: 
- Stitch Length: 10 to 15
- Pressure: **DARN**
- Zig-Zag Plate
- Zig-Zag Foot

1. If area to be darned is open, baste an underlay in place. Set machine according to code.
2. Place area to be darned under presser foot; lower presser foot and start stitching, alternately drawing fabric toward you and pulling it gently away from you.
3. Continue this forward and backward motion as you fill the area with parallel lines of stitching. For additional strength, cover area with crosswise lines of stitching.

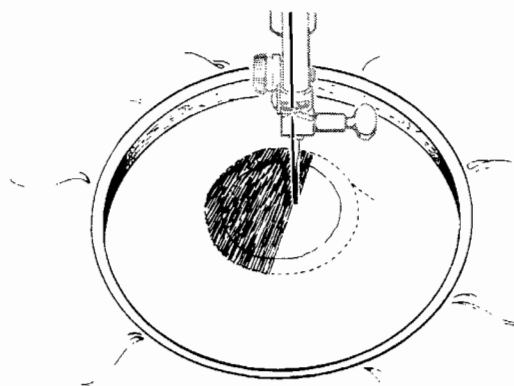


**Darning without Embroidery Hoop**

### With Embroidery Hoop†

- Stitch: Straight †
- Stitch Width: 
- Needle Position: 
- Stitch Length: In **FINE** area
- Feed Cover Plate (See page 4 for attaching)
- No Presser Foot or Presser Foot Shank

1. Attach feed cover plate (see page 4).
2. Trim ragged edges from area to be darned and center worn section in embroidery hoop designed for machine use.
3. Position work under needle and *lower the presser bar to engage tension.*
4. Hold needle thread loosely with left hand, turn hand wheel over, and draw bobbin thread up through fabric. Hold both thread ends and lower needle into fabric.
5. Outline area to be darned with running stitches for reinforcement.
6. Stitch across opening, moving hoop back and forth under needle. Keep lines of stitching closely spaced and even in length.
7. When opening is filled, cover area with crosswise lines of stitching.



**Darning with Embroidery Hoop**

†For best results, *Flip & Sew* panel should be up when darning with embroidery hoop.

## MENDING

Many stitch patterns are just as useful for mending as they are for creative sewing. The multi-stitch zig-zag forms a firm, flexible bond that is ideal for repairing tears and replacing elastic. The straight stretch stitch provides for the repair and reinforcement of pressed-open seams. Bar tacks to reinforce points of strain are made with the plain zig-zag stitch or the arrowhead stitch.

### Mending a Tear

- Stitch: Multi-Stitch Zig-Zag 
- Stitch Width: 3 to 5
- Needle Position: 
- Stitch Length: 20
- Zig-Zag Plate
- Zig-Zag Foot

1. Trim ragged edges.
2. Place underlay on the wrong side of torn area for reinforcement. (Do not baste or pin the underlay since you will be bringing the edges of the tear together in the next step.)
3. Stitch on the right side, bringing the edges of the tear together.
4. Shorten stitch length at ends and corners to give extra strength.
5. Trim underlay.



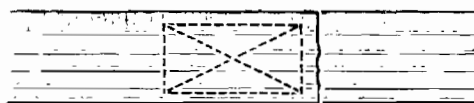
Tear Mended with Multi-Stitch Zig-Zag

## REPLACING LINGERIE ELASTIC

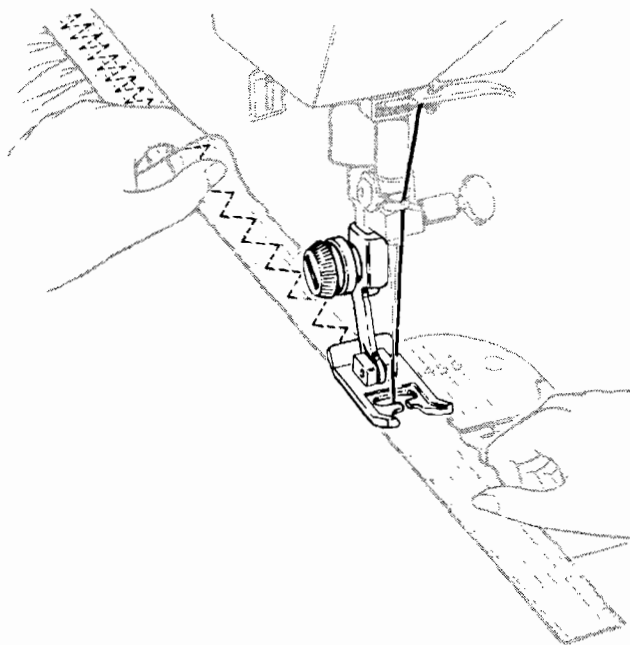
When replacing waistline elastic in lingerie, use the same settings and accessories as for mending a tear.

1. Fit elastic for desired snugness at waistline, allowing one inch for joining. Lap ends to form a band and straight stitch together as shown.
2. Divide elastic band into four equal segments and mark with pins. Do the same to the garment. Then pin together at corresponding points, pinning elastic over right side of fabric, top edges even.
3. Take a few straight stitches to anchor elastic to fabric. Select multi-stitch zig-zag. Then hold elastic and garment edge taut as you stitch so that it will remain stretchable after stitching is completed.

**CAUTION:** Do not pull the fabric while you are stitching as this may deflect the needle, causing it to break.

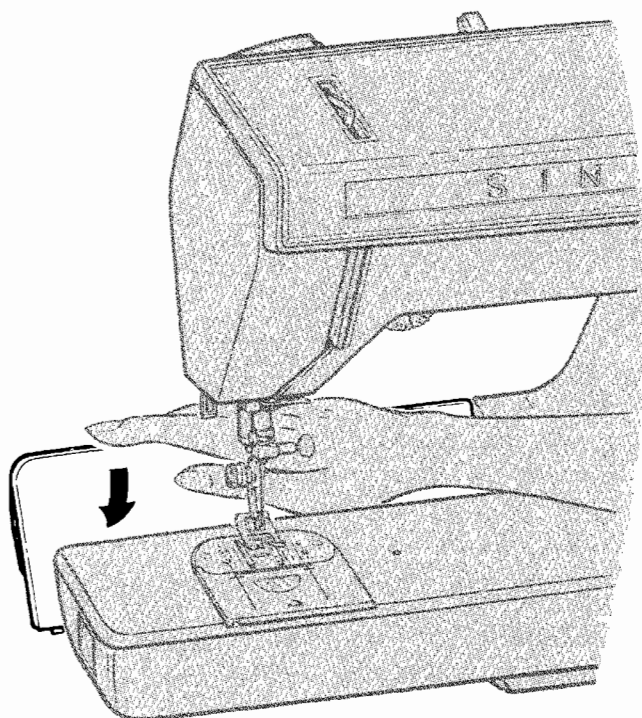


Joining Elastic



Replacing Lingerie Elastic

## 8. FREE-ARM SEWING

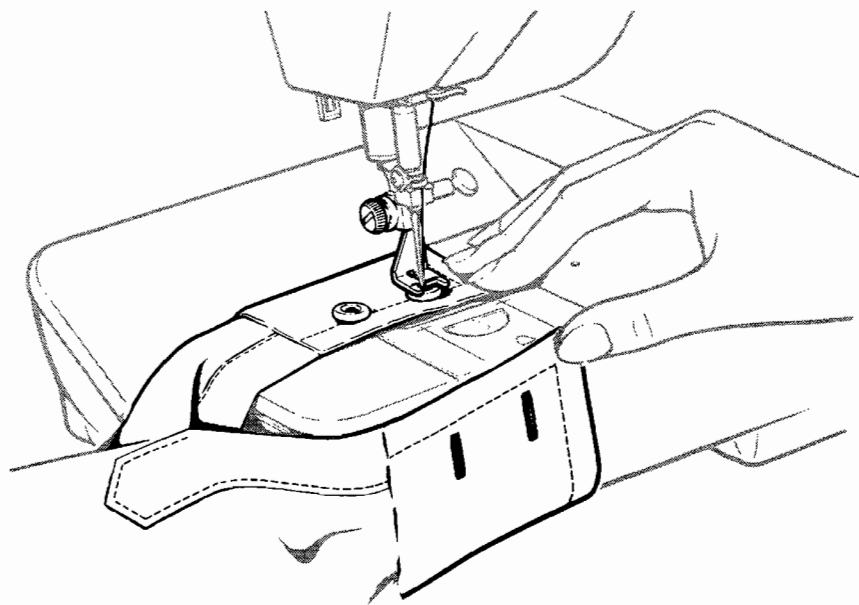


Fabric handling, when sewing tubular and hard to reach garment areas, is simplified when you convert your machine to free-arm sewing. A few of the sewing jobs for which you will find the free arm particularly useful are shown on the following pages. You will discover many more for yourself.

To convert your machine for free-arm sewing, simply press down on the corner of the *Flip & Sew* panel on sewing machine with heel of right hand.

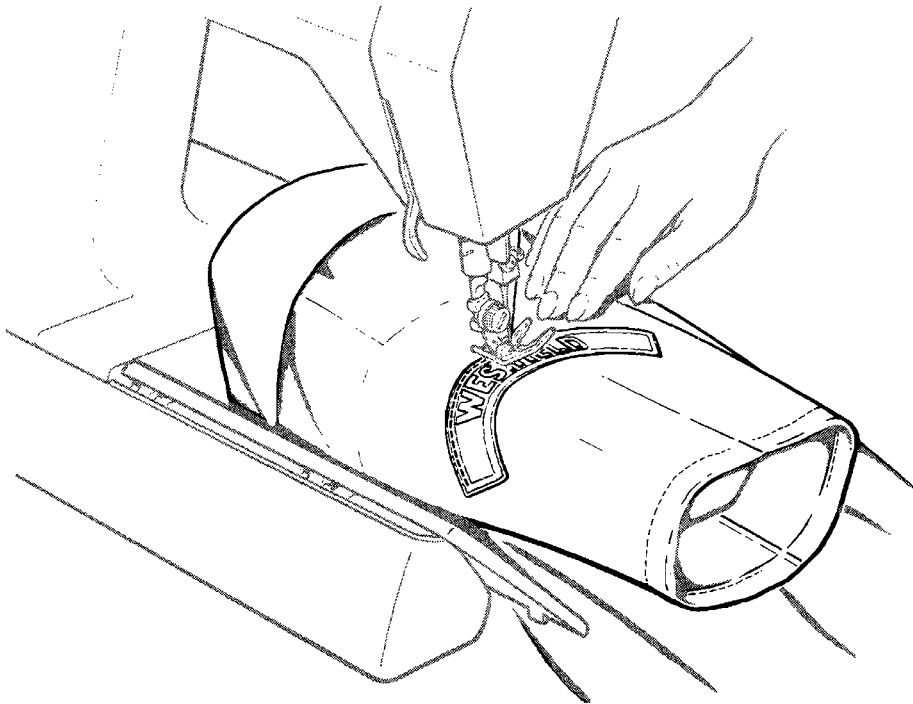
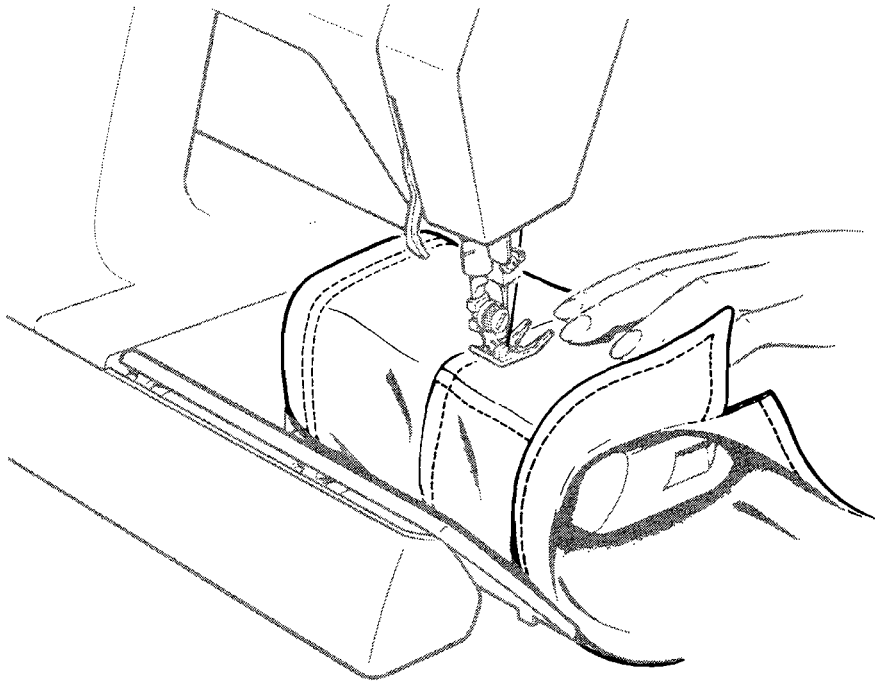
To raise *Flip & Sew* panel, place hand under panel and lift up until it locks into place. A click will be heard when panel is locked in position.

### BUTTONHOLES AND BUTTONS



Sewing buttons on a cuff or neckband is no longer a task when the free-arm surface is used. Cuffs slip around the sewing surface without being pulled out of shape, so you can see and handle the stitching area easily.

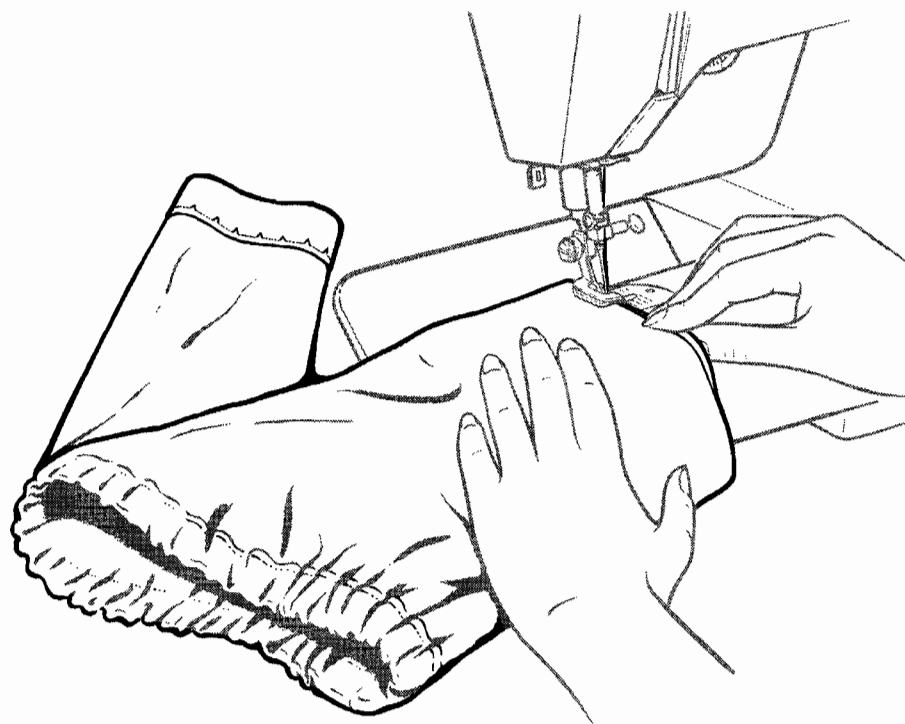
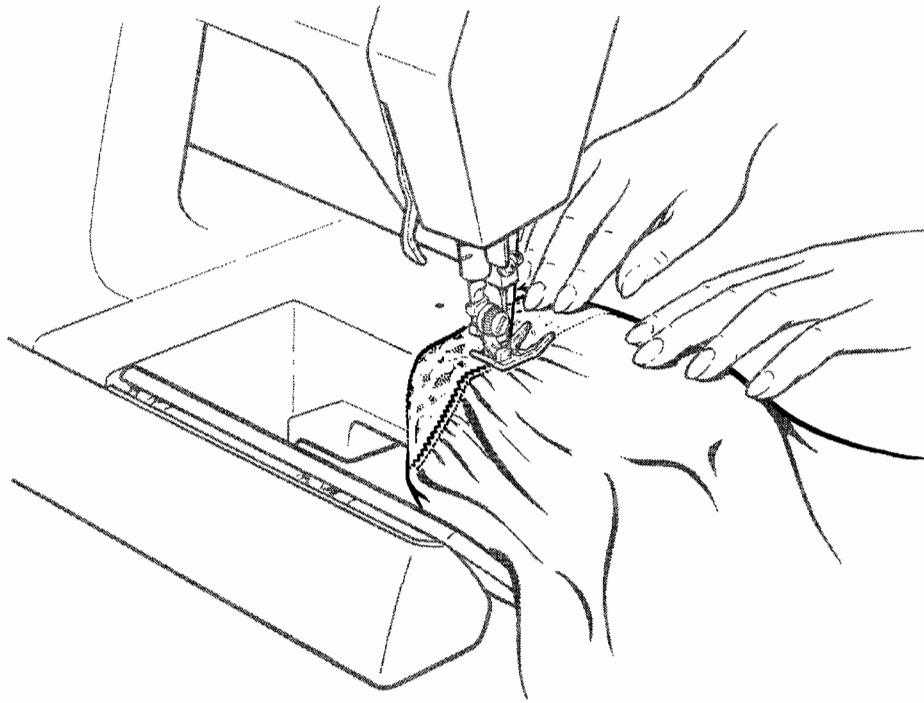
## SLEEVES



Free-arm sewing takes the difficulty out of stitching a sleeve. The armhole rotates smoothly under the needle so that you can place stitching accurately. The extra control afforded by the free arm is especially helpful for topstitching flat-fell seams.

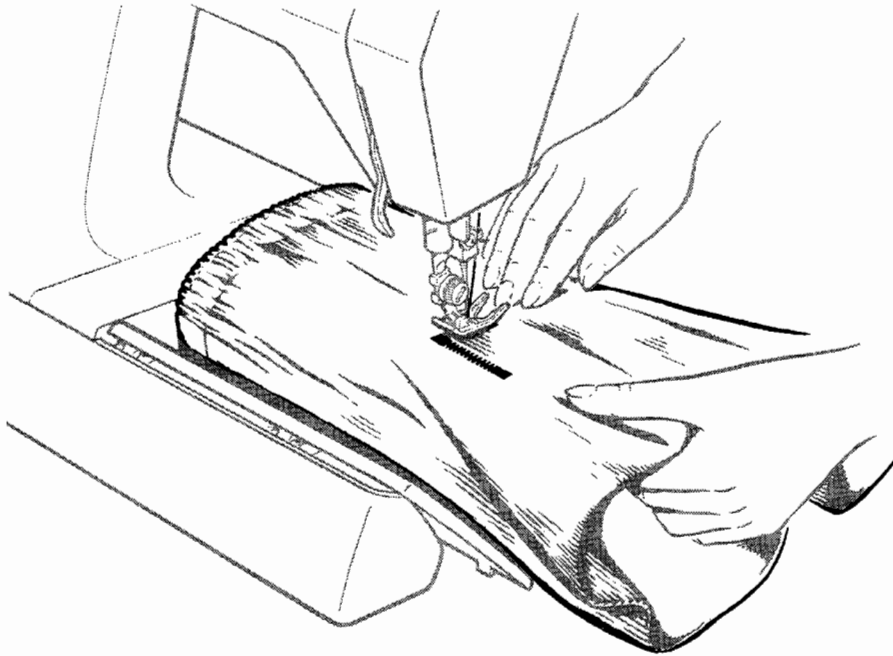
Badges, emblems and insignia of all sizes and shapes can be attached to shirts and uniforms by slipping sleeve or hard-to-reach area over the sewing surface.

## EDGE FINISHES



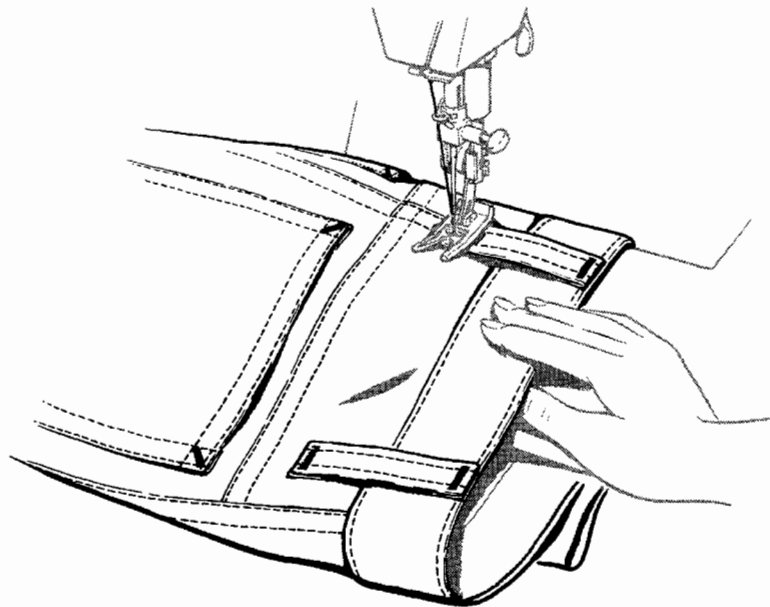
The free-arm surface makes it easy to finish sleeves, pant legs and waistlines. These circular garment areas rotate smoothly around the sewing surface, giving you full visibility and control as you blindstitch hems, attach elastic, or topstitch cuffs.

## DARNING AND MENDING



Knees, elbows and other areas of wear in children's clothes, sweaters, jackets and shorts become readily accessible for darning, mending or patching when the free-arm surface is used. The sewing surface fits inside the enclosed sleeve and leg areas, making it unnecessary to open seams or roll the garment. For darning, follow the instructions on page 46 and refer to page 47 for mending information.

## BAR TACKS



Bar tacks reinforce areas of strain and can be applied to ready-made garments, as well as to those sewn at home. Use the free-arm surface to avoid fabric bulk around the needle when you apply this detail to pockets, plackets, and waistlines.

# 9. CARING FOR YOUR SEWING MACHINE

## *cleaning the machine*

**CAUTION:** Before cleaning your machine, disconnect power-line plug from electrical supply.

Your machine will serve you perfectly for many years if you take a few moments to clean it. How often you will need to clean the machine will depend on how often you use it.

Remove lint or fluff from exposed parts.

With a soft cloth or lint brush, clean:

- Tension discs, presser bar, and needle bar
- Take-up lever and thread guides
- Machine surface. (If necessary, dampen the cloth and use a mild soap.)

With a fine cord or multiple strands of thread, clean:

- Thread-retainer spring

Open slide plate, remove bobbin (see page 10), and remove plate as instructed on page 4.

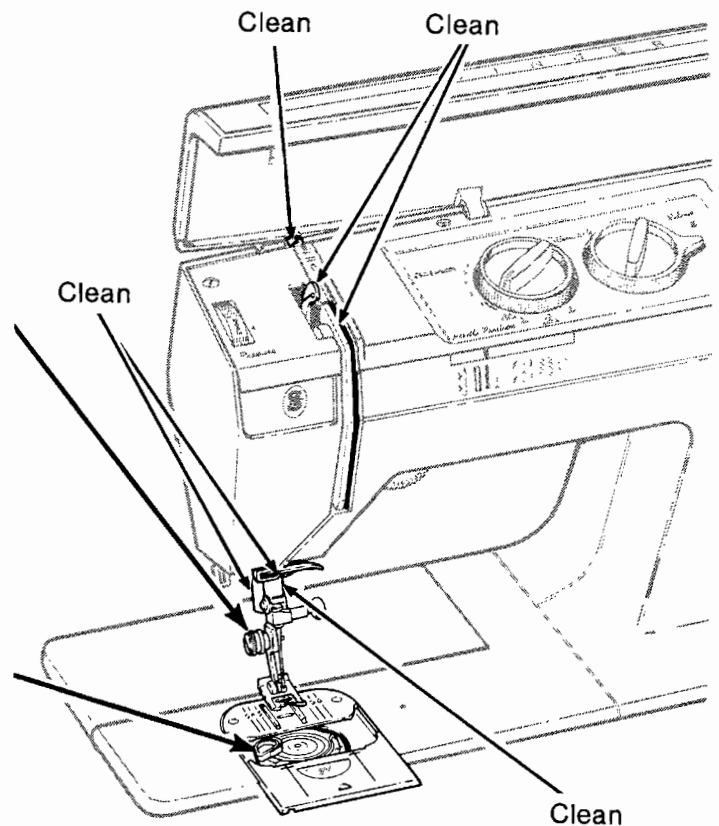
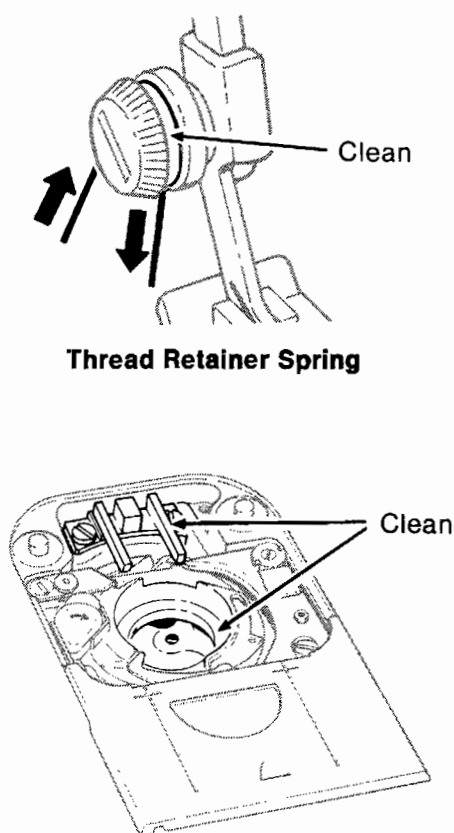
With the lint brush, clean:

- Area around feed
- Area in and around the bobbin case

With the lint brush or soft cloth, clean:

- Bobbin window (If necessary, tilt machine back slightly to clean underside of window.)

Your machine requires **no oiling** under normal conditions. Your SINGER representative, or Approved Dealer, will examine the permanently lubricated parts whenever your sewing machine requires servicing.



## changing the light bulb

**CAUTION:** Before changing light bulb, make sure you have disconnected power-line plug from electrical outlet.

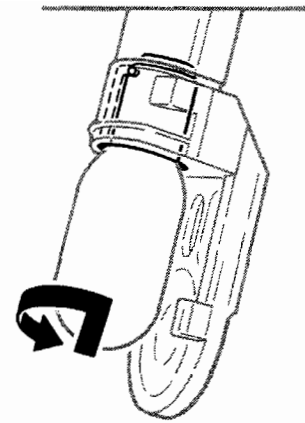
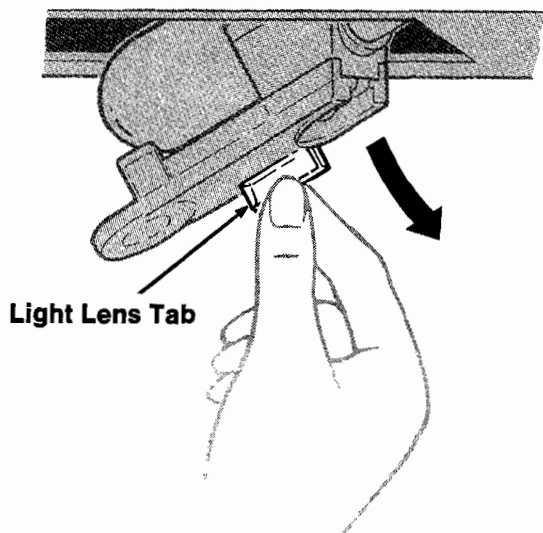
When changing to a new bulb be sure to use a 15-watt bayonet base bulb only.

### REMOVING BULB

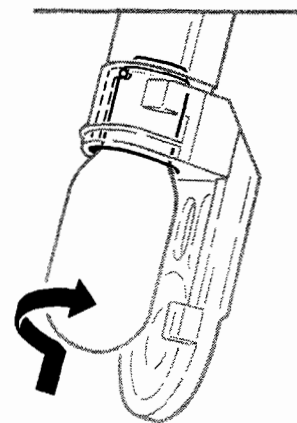
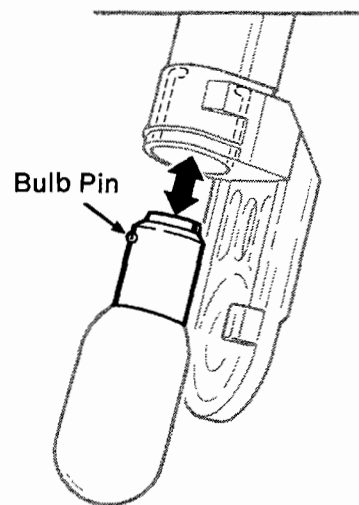
Using thumb and forefinger of right hand, pull down on tab located under light lens to lower the light bracket. Do not attempt to unscrew the bulb. Press bulb up into the socket and at the same time turn it over in the direction shown to unlock bulb pin.

### REPLACING BULB

Press new bulb into socket, with bulb pin entering slot of socket, and turn it over in direction shown to lock bulb in position. Push entire assembly up until it snaps in position.



Unlocking Bulb



Locking Bulb



## *performance checklist*

Should you encounter a sewing problem, review the sewing operation you are performing. If the problem persists, the following hints should help you correct it.

### **If the machine does not start: make sure**

- Machine is connected to electrical supply.
- Power and light switch is on.
- Bobbin has not been wound too full. (Do not wind beyond outer ring on bobbin.) If too full, remove excess thread.

### **If the needle bar moves but the stitch is not formed: make sure**

- Needle is straight.
- Needle size and style are correct for the thread you are using.
- Machine and needle are correctly threaded.
- Bobbin contains thread.
- Bobbin-case area is free of lint and loose thread ends.
- You are using a ball point *Yellow Band*\* needle to sew knit or stretch fabrics.

### **If fabric puckers: make sure**

- Needle-thread tension is not too tight.
- Presser-foot pressure is correctly set.

### **If fabric does not move: make sure**

- Presser foot is down and pressure dial is adjusted for the weight and texture of your fabric.
- Stitch-length dial is correctly set.
- All lint is removed from around the feed.
- Presser foot or accessory is correctly attached.

### **If stitching is irregular, or needle thread breaks: make sure**

- Machine is correctly threaded.
- Thread is even and free of knots.
- Needle is straight and correct size for thread and fabric.
- Spool holder is pressed firmly against thread spool and thread unwinds smoothly from spool.
- Needle-thread tension is not too tight.
- Presser foot is raised for bobbin winding.
- Bobbin case is correctly threaded (when inserting a previously wound bobbin).
- Threads are correctly placed under presser foot when you start to sew.
- Bobbin-case area is free of lint and loose thread ends.
- Bobbin is not damaged.

### **To prevent needle breakage: make sure**

- Twin needle does not strike plate during stitching (stitch width should not exceed 2.5).
- Needle is not bent or burred, is the correct style for your machine model, and is the proper size for the thread you are using.
- Needle is fully inserted in needle clamp.
- Presser-foot shank is securely fastened to presser bar.
- Fabric being guided or supported behind the needle is not being pulled too hard.
- Machine is set for straight stitching when you use straight-stitch foot.

## *Enjoy Sewing!*

If you have any questions, please write to:

The Singer Company  
Consumer Affairs Department  
321 First Street  
Elizabeth, N. J. 07207

## 10. SEWING AIDS

### *special accessories for special jobs*

Sewing Aids have been designed to increase the versatility of your sewing machine and enable you to give your sewing that extra professional touch. The ones described below are just a few of the complete selection available at your local Singer Sewing Center.

#### **Hemmer Foot**

No. 171145

Narrow hems can be turned and stitched in a single operation if you use the hemmer foot. Thus, you can eliminate basting or pinning whenever you are making ruffle edges, lingerie finishes, and the like.

#### **Quilting Foot**

No. 160691

The quilting foot is especially well adapted to stitching lightly padded fabrics. It is excellent for the placement of straight stitching in block, floral, or scroll designs. This short, open foot permits following curved lines with ease and accuracy.

#### ***Even Feed* Foot**

No. 506415

The *Even Feed* Foot is effective in keeping fabric piles even, and in matching plaids, stripes, and patterns. It is an invaluable aid for sewing hard-to-feed vinyl and fake fur, pile, stretch, bonded and laminated fabrics. Ideal for topstitching.

#### **Gathering Foot**

No. 161169

The gathering foot can be used for evenly spaced shirring as well as for a single line of gathering. This foot is used for straight stitching only.

#### **Ruffler**

No. 161561

This accessory offers a simple, effective way to make gathered and pleated ruffles. The ruffler is used for straight stitching only.

#### **Finger Guard**

No. 161681

The finger guard provides extra safety by protecting fingers from the needle. It is ideal for the student, new sewer, or the blind person.

# your personal measurements

This chart will enable you to keep a record of your measurements. You will need the assistance of someone to help you to take the measurements carefully with an accurate tape measure.

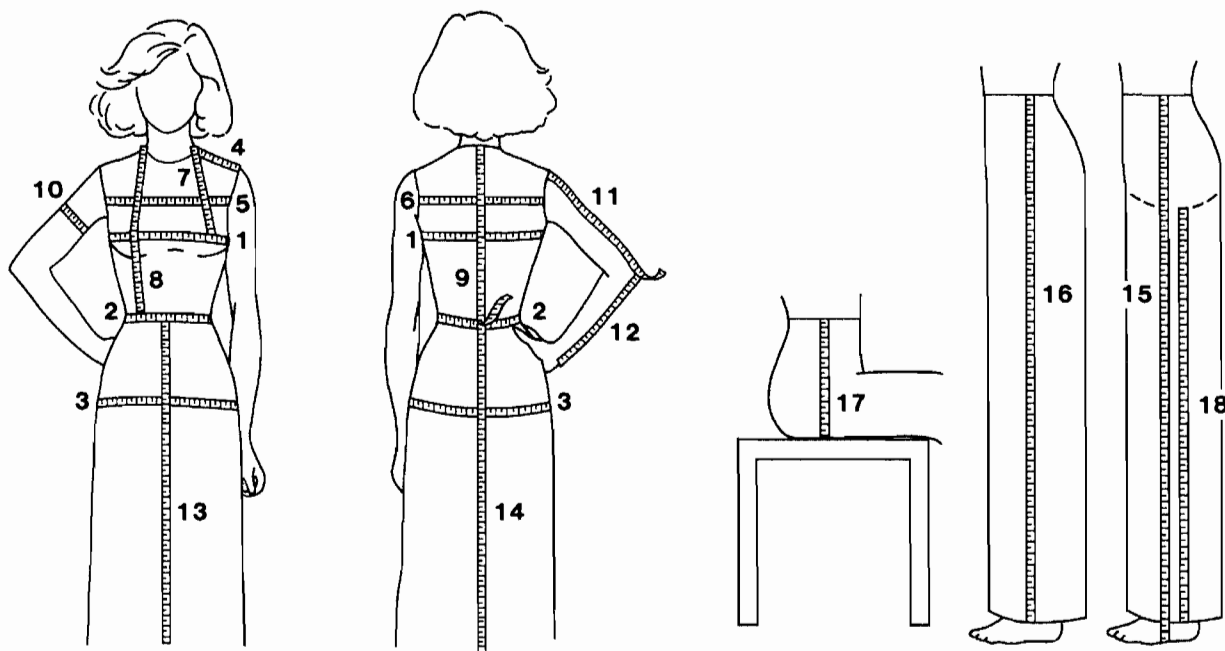
The illustrations show where tape measure should be placed when taking each measurement.

As a starting point, use a ribbon firmly but comfortably tied at the waist before taking measurements.

	inches	(cm)
1. <b>Bust</b> — Fullest part — slightly higher in back .....	_____	_____
2. <b>Waist</b> — Around natural waistline .....	_____	_____
3. <b>Hip</b> — .....inches (cm) below natural waistline (fullest part) .....	_____	_____
4. <b>Shoulder</b> — From base of neck to top of arm .....	_____	_____
5. <b>Front Bodice Width</b> — From arm hole to arm hole 5 inches (13cm) down from center shoulder .....	_____	_____
6. <b>Back Bodice Width</b> — From arm hole to arm hole 4 inches (10cm) down from center shoulder .....	_____	_____
7. <b>Shoulder to Bust</b> — From neck base at shoulder to point of bust .....	_____	_____
8. <b>Front Waist Length</b> — From neck base at shoulder over fullest part of bust to waistline .....	_____	_____
9. <b>Back Waist Length</b> — From the prominent bone at base of neck to natural waistline ..	_____	_____
10. <b>Sleeve Width</b> — Around arm at upper edge of underarm seam .....	_____	_____
11. <b>Sleeve Length</b> — Shoulder to elbow .....	_____	_____
12. <b>Sleeve Elbow to Wrist</b> .....	_____	_____
13. <b>Front Skirt Length</b> — Down center from waistline to hem .....	_____	_____
14. <b>Back Skirt Length</b> — Down center from waistline to hem .....	_____	_____

## PANTS MEASUREMENT CHART

15. <b>Full Length</b> — Waist to floor at side seam .....	_____	_____
16. <b>Pant Length</b> — Waist to ankle .....	_____	_____
17. <b>Crotch Depth (seated)</b> — Waist to chair at side seam .....	_____	_____
18. <b>Crotch Seam (standing)</b> — Crotch depth 17 to be deducted from pant length 16 .....	_____	_____



[illegible]

## INDEX

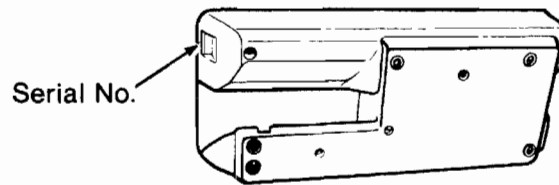
Accessories .....	2	Pin Basting .....	14
Adjusting Machine to Fabric .....	12	Plates .....	2, 3, 4
Appliqué .....	43	Changing Plates .....	4
Blindstitch Hem Guide .....	3	Feed Cover Plate .....	3
Blindstitch Hems .....	32	Straight-stitch Plate .....	2
Bobbin .....	2, 9, 10, 11	Zig-Zag Plate .....	2
Raising Bobbin Thread .....	11	Slide Plate .....	1
Removing Bobbin .....	10	Power and Light Switch .....	1, 5
Removing Thread .....	10	Presser Feet .....	2, 3, 4, 31
Replacing an Empty Bobbin .....	10	Button Foot .....	2
Replacing a Wound Bobbin .....	11	Buttonhole Foot .....	2
Winding .....	9	Changing Presser Feet .....	4
Built-in Stitches .....	18	Special-purpose Foot .....	2
Buttonholes .....	25	Straight-stitch Foot .....	2
Corded Buttonholes .....	30	Zig-Zag Foot .....	2
Buttons .....	24	Zipper Foot .....	3, 31
Caring for your Machine .....	52	Pressure Adjustments .....	1, 12, 35
Choosing Needle and Thread .....	7	Principal Parts .....	1
Construction Details .....	31	Replacing Elastic .....	47
Corded Seams .....	31	Reverse Stitching .....	17
Darning .....	46	Satin Stitching .....	42
Darts .....	33	Seams .....	15, 17, 31, 36, 38
Decorative Touches .....	42	Corded .....	31
Elastic, Replacing .....	47	Curved .....	17
Electrical Connections .....	5	Overedged .....	38
Embroidery .....	44	Straight .....	15
Fabric-Handling Table .....	40	Straight Stretch .....	36
Fabric, Thread, and Needle Table .....	7	Sewing Aids .....	55
Finishes for Hems and Facings .....	39	Sewing Knit and Stretch Fabric .....	34
Free-Arm Sewing .....	48	Speed Controller .....	1, 5
Free-Motion Embroidery .....	44	Spool Holder .....	1, 6
Guiding and Supporting Fabric .....	35	Stitch Balance .....	21
Length of Stitch .....	20	Stitch Length Adjustments .....	13, 20
Light Bulb .....	53	Stitch Placement .....	19
Mending .....	47	Stitch-width Dial .....	20
Mock Overedging .....	39	Straight Stitching .....	12, 14, 15, 16, 17
Needle .....	2, 6, 8, 19, 22	Curved Seams .....	17
Changing .....	6	Reinforcing End of Seam .....	17
Lifter .....	1	Straight Seams .....	16
Position Ring .....	19	Turning Square Corners .....	16
Threading .....	8, 22	Tension Adjustments .....	13, 20
Operating the Machine .....	5	Topstitching .....	51
Overedged Seams .....	38	Twin-Needle Stitching .....	22
Pattern Selector .....	19	Zig-Zag Stitching .....	18
Performance Checklist .....	54	Zippers .....	31



Dear Customer:

We recommend that for future reference you record the serial number of your Sewing Machine in the space provided.

Refer to illustration  
at right for location  
of serial number on  
your machine.



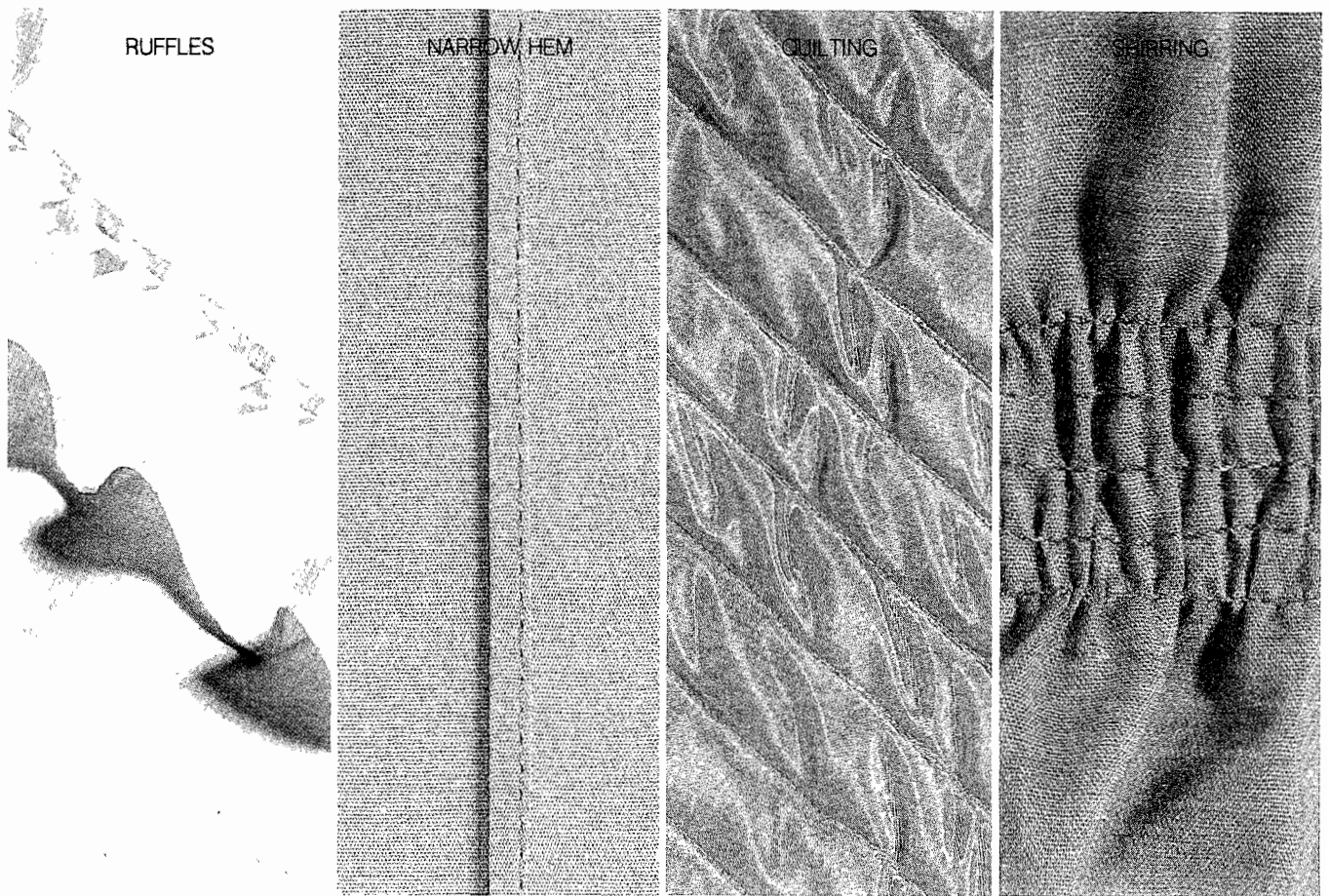
Serial No.....



***Enjoy Sewing!***

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Consumer Affairs Department  
321 First Street  
Elizabeth, N.J. 07207

# *Make Your Sewing Easier, Faster and Professional Looking!*



Frilly ruffles, narrow hems, luxurious quilting, and evenly-spaced shirring can add that professional touch to your sewing projects . . . and you can make them quickly and easily on your sewing machine . . . using only four of the many accessories available from your Singer Sewing Center.

**100 MILLION PEOPLE SEW EASIER WITH SINGER**